

```
17 =0100 IOCNT0 EQU >0100 P0 - I/O Control Register 0  
18 =0104 APORT EQU >0104 P4 - Port A Data  
19 =0105 ADDR EQU >0105 P5 - Port A Direction  
20 =0106 BPRT EQU >0106 P6 - Port B Data (Bits 0-2)  
21 =0110 IOCNT1 EQU >0110 P16 - I/O Control Register 1  
22 =0111 SMODE EQU >0111 P17 - Serial Mode (First Write)  
23 =0111 SCTLO EQU >0111 P17 - Serial Control 0 (Write)  
24 =0111 SSTAT EQU >0111 P17 - Serial Status (Read)  
25 =0114 T3DATA EQU >0114 P20 - Timer 3 Data  
26 =0115 SCTL1 EQU >0115 P21 - Serial Control 1  
27 =0116 RXBUF EQU >0116 P22 - Receive Buffer  
28 =0118 L0118 EQU >0118  
29  
30 =0000 L0000 EQU >0000 Register File  
31 =2000 L2000 EQU >2000 U11 (LS374) Data to DED (U7)  
32 =4000 L4000 EQU >4000 U12 (LS244) DED/U5 Data bus  
33 =6000 L6000 EQU >6000 U20 (5516) 2Kx8 CMOS Static RAM
```

ROM Checksum

```
37 C000 84 LC000 DB >84 High byte  
38 C001 77 LC001 DB >77 Low byte
```

Command >0C

```
42 C002 32 08 LC002 MOV R8,B Message Pointer  
43 C004 AA 60 22 LDA @E6022(B)  
44 C007 8D 61 E7 CMFA @E61E7  
45 C00A E6 14 JNZ LC020  
46 C00C AA 60 23 LDA @E6023(B)  
47 C00F 8D 62 47 CMFA @E6247 Service ID  
48 C012 E6 0C JNZ LC020  
49 C014 88 62 8E 48 MOVD %628E,R72  
50 C018 58 02 LC018 ADD X02,B  
51 C01A 8E C0 79 CALL @C079  
52 C01D 8E C1 06 CALL @C106  
53 C020 8C F3 BA LC020 BR @F38A
```

Command >0A

```
55 C023 32 08 LC023 MOV R8,B Message Pointer  
56 C025 AA 60 02 LDA @E6002(B)  
57 C028 8D 62 47 CMFA @E6247 Service ID
```

C02D	AA 60 04	LDA @6004(B)
C030	E2 18	JZ LC04A
C032	8D 62 33	CMPA @6233
C035	E6 13	JNZ LC04A

C037	22 FF	MOV %FF,A
C039	8B 62 8D	STA @628D
C03C	8E F3 C5	CALL @F3C5
C03F	88 61 E4 48	MOVD %61E4,R72
C043	8E C1 16	CALL @C116
C046	B5	CLR A
C047	8B 62 8D	STA @628D
C04A	8C F3 8A	LC04A BR @F38A

Command >08

1	C04D	7D 47 20	LC04D CMP %47,R32
2	C050	E6 F8	JNZ LC04A
3	C052	32 08	MOV R8,B Message pointer
4	C054	AA 60 24	LDA @6024(B)
5	C057	8D 62 47	CMPA @6247
6	C05A	E6 EE	JNZ LC04A
7	C05C	88 63 0F 48	MOVD %630F,R72
8	C060	8C C0 18	BR @C018
9	C063	78 02 48	LC063 ADD %02,R72
10	C066	79 00 47	ADC %00,R71
11	C069	9A 48	LDA *R72
12	C06B	8B 62 82	LC06B STA @6282
13	C06E	12 47	MOV R71,A
14	C070	8B 62 83	STA @6283
15	C073	12 48	MOV R72,A
16	C075	8B 62 84	STA @6284
17	C078	0A	RETS
18	C079	9A 48	LC079 LDA *R72
19	C07B	D1 0B	MOV B,R11
20	C07D	AD 60 00	CMPA @6000(B)
21	C080	E6 E1	JNZ LC063
22	C082	D3 48	INC R72
23	C084	79 00 47	ADC %00,R71
24	C087	9A 48	LDA *R72
25	C089	D3 48	INC R72
26	C08B	79 00 47	ADC %00,R71
27	C08E	B0	TSTA
28	C08F	E2 15	JZ LC0A6
29	C091	AA 60 01	LDA @6001(B)
30	C094	23 03	AND %03,A
31	C096	C0	MOV A,B
32	C097	AA C1 6C	LDA @C16C(B) >01,03,07,0F,3F,7F,FF
33	C09A	9B 48	STA *R72
34	C09C	B5	CLR A
35	C09D	DB 48	DECD R72
36	C09F	9B 48	STA *R72
37	COA1	D3 48	INC R72
38	COA3	79 00 47	ADC %00,R71
39	COA6	32 0B	LC0A6 MOV R11,B
40	COA8	AA 60 01	LDA @6001(B)
41	COAB	C0	MOV A,B
42	COAC	CC	RR B
43	COAD	CC	RR B
44	COAE	53 03	AND %03,B
45	COBO	D1 0A	MOV B,R10
46			
47	COB2	AA C1 64	LDA @C164(B) >01,02,04,08,10,20,40,80
48	COB5	C0	MOV A,B
49	COB6	9A 48	LDA *R72
50	COB8	67 B1	BTJZ B,A,LC06B
51	COBA	55 FF	XOR %FF,B
52	COBC	63	AND B,A
53	COBD	8B 62 82	STA @6282
54	COC0	12 47	MOV R71,A
55	COC2	8B 62 83	STA @6283
56	COC5	12 48	MOV R72,A
57	COC7	8B 62 84	STA @6284

COCA	32	0B	MOV R11,B
COCC	AA	60 20	LDA @6020(B)
COCF	D3	48	INC R72
COD1	79	00 47	ADC %00,R71
COD4	9B	48	STA *R72
COD6	AA	60 21	LDA @6021(B)
COD9	D3	48	INC R72
CODB	79	00 47	ADC %00,R71
CODE	9B	48	STA *R72
COEO	D3	48	INC R72
COE2	79	00 47	ADC %00,R71
COE5	12	0A	MOV R10,A
COE7	CO		MOV A,B
COE8	CE		RL B
COE9	C7		SWAP B
COEA	3A	00	SUB R0,B
COEC	48	01 48	ADD R1,R72
COEF	79	00 47	ADC %00,R71
COF2	32	0B	MOV R11,B
COF4	72	1F 0A	MOV %1F,R10
COF7	AA	60 01	LCOF7 LDA @6001(B)
COFA	9B	48	STA *R72
COFC	C3		INC B
COFD	D3	48	INC R72
COFF	79	00 47	ADC %00,R71
C102	DA	0A F2	DJNZ R10,LC0F7
C105	0A		RETS
C106	8A	62 83	LC106 LDA @6283
C109	DO	47	MOV A,R71
C10B	8A	62 84	LDA @6284
C10E	DO	48	MOV A,R72
C110	8A	62 82	LDA @6282
C113	9B	48	STA *R72
C115	0A		RETS
C116	C5		LC116 CLR B
C117	D5	0A	CLR R10
C119	78	0D 48	ADD %0D,R72
C11C	79	00 47	ADC %00,R71
C11F	9A	48	LDA *R72
C121	E5	02	JZ LC125
C123	52	63	MOV %63,B
C125	72	07 09	LC125 MOV %07,R9
C128	7A	09 48	SUB %09,R72
C12B	7B	00 47	SBB %00,R71
C12E	9A	48	LC12E LDA *R72
C130	DO	0B	MOV A,R11
C132	AA	61 07	LDA @6107(B)
C135	43	00 0B	AND R0,R11
C138	44	0B 0A	OR R11,R10
C13B	C3		INC B
C13C	D3	48	INC R72
C13E	79	00 47	ADC %00,R71
C141	DA	09 EA	DJNZ R9,LC12E
C144	12	0A	MOV R10,A
C146	E6	05	JNZ LC14D
C148	D3	48	INC R72
C14A	79	00 47	ADC %00,R71

C14D	9A 48	LC14D LDA *R72
C14F	8D 62 8E	CMPA @628E
C152	E6 01	JNZ LC155
1 C154	0A	RETS
2 C155	52 FF	LC155 MOV %FF,B
3 C157	B6	XCHB A
4 C158	8B 62 8F	STA @628F
5 C15B	62	MOV B,A
6 C15C	8B 62 8E	STA @628E
7 C15F	B5	CLR A
8 C160	8B 62 8B	STA @628B
9 C163	0A	RETS
10 C164	01 02 04 08	LC164 DB >01,02,04,08,10,20,40,80
11 C16C	01 03 07 0F	LC16C DB >01,03,07,0F,1F,3F,7F,FF
12 C174	74 20 20	LC174 OR %20,R32
13 C177	72 FF 17	MOV %FF,R23
14 C17A	8E FC 0A	CALL @FC0A
15 C17D	22 00	MOV %00,A
16 C17F	F9	TRAP 6 Write A to DED
17 C180	32 0E	MOV R14,B
18 C182	5A 02	SUB %02,B
19 C184	F5	TRAP 10
20 C185	58 01	ADD %01,B
21 C187	AA 60 FF	LDA @60FF(B)
22 C18A	D0 24	MOV A,R36
23 C18C	C3	INC B
24 C18D	AA 60 FF	LDA @60FF(B)
25 C190	D0 23	MOV A,R35
26 C192	C3	INC B
27 C193	A8 60 FF 35	MOVD %60FF(B),R53
28 C197	72 04 10	MOV %04,R16
29 C19A	F8	TRAP 7 Write R16 bytes @R52,53 to DED
30 C19B	F7	TRAP 8
31 C19C	22 01	MOV %01,A
32 C19E	F9	TRAP 6 Write A to DED
33 C19F	F7	TRAP 8
34 C1A0	22 02	MOV %02,A
35 C1A2	F9	TRAP 6 Write A to DED
36 C1A3	88 62 00 35	MOVD %6200,R53
37 C1A7	72 07 10	MOV %07,R16
38 C1AA	F8	TRAP 7 Write R16 bytes @R52,53 to DED
39 C1AB	F7	TRAP 8
40 C1AC	22 03	MOV %03,A
41 C1AE	F9	TRAP 6 Write A to DED
42 C1AF	88 62 07 35	MOVD %6207,R53
43 C1B3	72 0B 10	MOV %0B,R16
44 C1B6	F8	TRAP 7 Write R16 bytes @R52,53 to DED
45 C1B7	F7	TRAP 8
46 C1B8	22 09	MOV %09,A
47 C1BA	F9	TRAP 6 Write A to DED
48 C1BB	8A 62 46	LDA @6246
49 C1BE	F9	TRAP 6 Write A to DED
50 C1BF	F7	TRAP 8
51 C1C0	22 07	MOV %07,A
52 C1C2	F9	TRAP 6 Write A to DED
53 C1C3	C5	CLR B

C1C4	F4	LC1C4 TRAP 11 Read DED/U5 data
C1C5	AB 62 3A	STA @623A(B)
C1C8	C3	INC B
C1C9	5D 0C	CMP %OC,B
C1CB	E6 F7	JNZ LC1C4
C1CD	B5	CLR A
C1CE	8B 62 2B	STA @622B
C1D1	73 DF 20	AND %DF,R32
C1D4	8C F9 98	BR @F998
		Command >12
C1D7	D5 09	LC1D7 CLR R9
C1D9	EO 03	JMP LC1DE
		Command >13
C1DB	72 63 09	LC1DB MOV %63,R9
C1DE	32 08	LC1DE MOV R8,B Message Pointer
C1E0	8A 62 33	LDA @6233
C1E3	E2 05	JZ LC1EA
C1E5	AD 60 02	CMPA @6002(B)
C1E8	E2 0A	JZ LC1F4
C1EA	B5	LC1EA CLR A
C1EB	8B 61 5F	STA @615F
C1EE	8B 61 C2	STA @61C2
C1F1	8C F3 8A	BR @F38A
C1F4	D0 0A	LC1F4 MOV A,R10
C1F6	AA 60 03	LDA @6003(B)
C1F9	D0 0B	MOV A,R11
C1FB	32 09	MOV R9,B Command
C1FD	AD 61 5E	CMPA @615E(B)
C200	E6 07	JNZ LC209
C202	12 0A	MOV R10,A
C204	AD 61 5F	CMPA @615F(B)
C207	E2 11	JZ LC21A
C209	B5	LC209 CLR A
C20A	AB 61 60	STA @6160(B)
C20D	AB 61 61	STA @6161(B)
C210	12 0A	MOV R10,A
C212	AB 61 5F	STA @615F(B)
C215	12 0B	MOV R11,A
C217	AB 61 5E	STA @615E(B)
C21A	52 05	LC21A MOV %05,B
C21C	AA 61 F8	LC21C LDA @61F8(B)
C21F	E6 05	JNZ LC226
C221	CA F9	DNJNZ B,LC21C
C223	8C C2 D0	BR @C2D0
C226	42 08 0D	LC226 MOV R8,R13 Message Pointer
C229	78 05 0D	ADD %05,R13
C22C	32 0D	LC22C MOV R13,B
C22E	AA 60 05	LDA @6005(B)
C231	1C 00	MPY R0,A
C233	98 01 4A	MOVD R1,R74
C236	8A 61 FC	LDA @61FC
C239	B7	SWAP A
C23A	23 0F	AND %OF,A
C23C	D0 0A	MOV A,R10
C23E	8A 61 F9	LDA @61F9

1	C241	D0 OB	MOV A,R11
2	C243	32 0D	MOV R13,B
3	C245	AA 60 03	LDA @6003(B)
4	C248	B7	SWAP A
5	C249	23 OF	AND ZOF,A
6	C24B	D0 OC	MOV A,R12
7	C24D	AA 60 00	LDA @6000(B)
8	C250	1A 0B	SUB R11,A
9	C252	4B 0A OC	SBB R10,R12
10	C255	E5 07	JPZ LC25E
11	C257	B4	INV A
12	C258	D4 OC	INV R12
13	C25A	B3	INC A
14	C25B	79 00 OC	ADC ZOO,R12
15	C25E	E6 74	LC25E JNZ LC2D4
16	C260	1C 00	MPY R0,A
17	C262	4A 01 4A	SUB R1,R74
18	C265	4B 00 49	SBB R0,R73
19	C268	E7 6A	JNC LC2D4
20	C26A	8A 61 FC	LDA @61FC
21	C26D	23 OF	AND ZOF,A
22	C26F	D0 OA	MOV A,R10
23	C271	8A 61 FA	LDA @61FA
24	C274	D0 OB	MOV A,R11
25	C276	32 0D	MOV R13,B
26	C278	AA 60 03	LDA @6003(B)
27	C27B	23 OF	AND ZOF,A
28	C27D	D0 OC	MOV A,R12
29	C27F	AA 60 01	LDA @6001(B)
30	C282	1A 0B	SUB R11,A
31	C284	4B 0A OC	SBB R10,R12
32	C287	E5 07	JPZ LC290
33	C289	B4	INV A
34	C28A	D4 OC	INV R12
35	C28C	B3	INC A
36	C28D	79 00 OC	ADC ZOO,R12
37	C290	E6 42	LC290 JNZ LC2D4
38	C292	1C 00	MPY R0,A
39	C294	4A 01 4A	SUB R1,R74
40	C297	4B 00 49	SBB R0,R73
41	C29A	E7 38	JNC LC2D4
42	C29C	8A 61 FD	LDA @61FD
43	C29F	B7	SWAP A
44	C2A0	23 OF	AND ZOF,A
45	C2A2	D0 OA	MOV A,R10
46	C2A4	8A 61 FB	LDA @61FB
47	C2A7	D0 OB	MOV A,R11
48	C2A9	32 0D	MOV R13,B
49	C2AB	AA 60 04	LDA @6004(B)
50	C2AE	B7	SWAP A
51	C2AF	23 OF	AND ZOF,A
52	C2B1	D0 OC	MOV A,R12
53	C2B3	AA 60 02	LDA @6002(B)
54	C2B6	1A 0B	SUB R11,A
55	C2B8	4B 0A OC	SBB R10,R12
56	C2BB	E5 07	JPZ LC2C4
57	C2BD	B4	INV A
58	C2BE	D4 OC	INV R12
59	C2CO	B3	INC A

	C2C1	79 00 0C	ADC %00,R12	1
	C2C4	E6 0E	LC2C4 JNZ LC2D4	2
	C2C6	1C 00	MPY R0,A	3
1	C2C8	4A 01 4A	SUB R1,R74	4
2	C2CB	4B 00 49	SBB R0,R73	5
3	C2CE	E7 04	JNC LC2D4	6
4	C2D0	D5 OC	LC2D0 CLR R12	7
5	C2D2	E0 12	JMP LC2E6	8
6	C2D4	32 0D	LC2D4 MOV R13,B	9
7	C2D6	58 06	ADD %06,B	10
8	C2D8	D1 0D	MOV B,R13	11
9	C2DA	3A 08	SUB R8,B	12
10	C2DC	5D 23	CMP %23,B	13
11	C2DE	E2 03	JZ LC2E3	14
12	C2EO	8C C2 2C	BR @C22C	15
13	C2E3	72 FF 0C	LC2E3 MOV %FF,R12	16
14	C2E6	32 08	LC2E6 MOV R8,B	17
15	C2E8	AA 60 04	LDA @6004(B)	18
16	C2EB	D0 0B	MOV A,R11	19
17	C2ED	32 09	MOV R9,B	20
18	C2EF	AA 61 60	LDA @6160(B)	21
19	C2F2	14 0B	OR R11,A	22
20	C2F4	AB 61 60	STA @6160(B)	23
21	C2F7	AA 61 61	LDA @6161(B)	24
22	C2FA	42 0C 0C	MOV R12,R12	25
23	C2FD	E6 06	JNZ LC305	26
24	C2FF	D4 0B	INV R11	27
25	C301	13 0B	AND R11,A	28
26	C303	E0 02	JMP LC307	29
27	C305	14 0B	LC305 OR R11,A	30
28	C307	AB 61 61	LC307 STA @6161(B)	31
29	C30A	8C F3 8A	BR @F38A	32
30				33
31	C30D	72 0A 10	LC30D MOV %0A,R16 40 Characters	34
32	C310	E0 0B	JMP LC31D	35
33	C312	C5	CLR B	36
34	C313	72 28 10	MOV %28,R16	37
35	C316	E0 05	JMP LC31D	38
36				39
37	C318	52 A0	LC318 MOV %A0,B Put on Line 9	40
38	C31A	72 05 10	LC31A MOV %05,R16 20 Characters	41
39	C31D	D6 3C	LC31D XCHB R60 Save B	42
40	C31F	9A 35	LDA *R53 Get byte from table	43
41	C321	C0	MOV A,B Put in B	44
42	C322	D3 35	INC R53 Go to next entry	45
43	C324	79 00 34	ADC %00,R52	46
44	C327	9A 35	LDA *R53 Get byte from table	47
45	C329	23 F0	AND %F0,A Get high nibble	48
46	C32B	CD	RRC B	49
47	C32C	BD	RRC A	50
48	C32D	CD	RRC B	51
49	C32E	BD	RRC A	52
50	C32F	B6	XCHB A Restore B (Offset)	53
51	C330	D6 3C	XCHB R60	54
52	C332	F3	TRAP 12 Write A @B in display memory	55
53	C333	12 3C	MOV R60,A	56
54	C335	E0 1B	JMP LC352	57
55	C337	9A 35	LC337 LDA *R53 Get next byte	58
56	C339	C0	MOV A,B Put in B	59
57	C33A	D3 35	INC R53 Go to next entry	60

C33C 79 00 34 ADC %00,R52
 C33F 9A 35 LDA *R53 Get next byte
 C341 23 F0 AND %FO,A Get high nibble
 C343 CD RRC B
 C344 BD RRC A
 C345 CD RRC B
 C346 BD RRC A
 C347 B6 XCHB A
 C348 A4 02 06 ORP %02,BPORT Set B1 - U6P12 (LDI) high
 C34B 8B 20 00 STA @2000 U6 data port
 C34E A3 FD 06 ANDP %FD,BPORT Set B1 - U6P12 low
 C351 62 MOV B,A Get low nibble
 C352 BC LC352 RR A Fix it
 C353 BC RR A
 C354 A4 02 06 ORP %02,BPORT Set B1 - U6P12 high
 C357 8B 20 00 STA @2000 U6 data port
 C35A A3 FD 06 ANDP %FD,BPORT Set B1 - U6P12 low
 C35D 9A 35 LDA *R53 Get next byte
 C35F C0 MOV A,B Put in B
 C360 53 0F AND %0F,B Get low nibble
 C362 D3 35 INC R53 Go to next entry
 C364 79 00 34 ADC %00,R52
 C367 9A 35 LDA *R53 Get next byte
 C369 BE RL A
 C36A CF RLC B
 C36B BE RL A
 C36C CF RLC B
 C36D 62 MOV B,A
 C36E A4 02 06 ORP %02,BPORT Set B1 - U6P12 high
 C371 8B 20 00 STA @2000 U6 data port
 C374 A3 FD 06 ANDP %FD,BPORT Set B1 - U6P12 low
 C377 9A 35 LDA *R53 Get next byte
 C379 23 3F AND %3F,A Mask to 5 bits
 C37B A4 02 06 ORP %02,BPORT Set B1 - U6P12 high
 C37E 8B 20 00 STA @2000 U6 data port
 C381 A3 FD 06 ANDP %FD,BPORT Set B1 - U6P12 low
 C384 D3 35 INC R53 Go to next entry
 C386 79 00 34 ADC %00,R52
 C389 DA 10 AB DJNZ R16,LC337
 C38C 0A RETS
 C38D 72 9F 3B LC38D MOV %9F,R59
 C390 E0 03 JMP LC395
 TRAP 17
 # FILL DISPLAY MEMORY WITH CONTENTS OF A
 C392 72 B3 3B LC392 MOV %B3,R59 R59=179
 C395 C5 LC395 CLR B B=0
 C396 F3 LC396 TRAP 12 Write A @B in display memory
 C397 F2 LC397 TRAP 13 Write A to display memory
 C398 DA 3B FC DJNZ R59,LC397 Fill display memory with A
 C39B 52 B4 MOV %B4,B Start with Horiz Display Pos res
 C39D 22 0A MOV %OA,A Horizontal starting position
 C39F F3 TRAP 12 Write A to Horiz Display Pos res
 C3A0 22 10 MOV %10,A Verticle starting position
 C3A2 F2 TRAP 13 Write A to Vert Display Pos res
 C3A3 22 70 MOV %70,A Set display on (BLK)

Enable background display
Enable blinking

TRAP 13 Write A to Display Control reg
RETS

1 C3A5 F2
2 C3A6 0A
3 C3A7 98 46 35 LC3A7 MOVD R70,R53
4 C3AA 78 05 35 ADD X05,R53
5 C3AD 79 00 34 ADC X00,R52
6 C3B0 9A 35 LDA *R53
7 C3B2 23 03 AND X03,A
8 C3B4 B3 INC A
9 C3B5 D0 3B MOV A,R59
10 C3B7 9A 35 LC3B7 LDA *R53
11 C3B9 23 70 AND X70,A
12 C3BB C0 MOV A,B
13 C3BC BC RR A
14 C3BD BC RR A
15 C3BE 38 00 ADD R0,B
16 C3C0 D3 35 INC R53
17 C3C2 79 00 34 ADC X00,R52
18 C3C5 5D 8C CMP X8C,B Line 8
19 C3C7 E2 07 JZ LC3D0
20 C3C9 8E C3 0D CALL @C30D Put on line 9
21 C3CC DA 3B E8 DJNZ R59,LC3B7
22 C3CF 0A RETS
23 C3D0 8E C3 1A LC3D0 CALL @C31A
24 C3D3 0A RETS
25 C3D4 72 08 3B LC3D4 MOV X08,R59 8 Lines
26 C3D7 E0 03 JMP LC3DC
27
28 TRAP 18
29
30 C3D9 72 09 3B LC3D9 MOV X09,R59 9 Lines
31 C3DC 72 00 3A LC3DC MOV X00,R58 Line counter
32 C3DF 9A 46 LC3DF LDA *R70
33 C3E1 D0 34 MOV A,R52
34
35 C3E3 D3 46 INC R70
36 C3E5 79 00 45 ADC X00,R69
37 C3E8 9A 46 LDA *R70
38 C3EA D0 35 MOV A,R53
39 C3EC D3 46 INC R70
40 C3EE 79 00 45 ADC X00,R69
41 C3F1 32 3A MOV R58,B
42 C3F3 8E C3 1A CALL @C31A
43 C3F6 78 14 3A ADD X14,R58
44 C3F9 DA 3B E3 DJNZ R59,LC3DF
45 C3FC 0A RETS
46
47 C3FD 72 FF 2C LC3FD MOV XFF,R44
48 C400 E0 0D JMP LC40F
49 C402 72 00 2C LC402 MOV X00,R44
50 C405 E0 08 JMP LC40F
51 C407 72 0F 2C LC407 MOV X0F,R44
52 C40A E0 03 JMP LC40F
53 C40C 72 7F 2C LC40C MOV X7F,R44
54 C40F B9 LC40F POP A
55 C410 8B 62 15 STA @6215
56 C413 B9 POP A
57 C414 8B 62 16 STA @6216

C417	D1	2F	MOV B,R47
C419	72	03	MOV ZO3,R45
C41C	42	21	MOV R33,R46
C41F	EA		LC41F TRAP 21
C420	72	0A	MOV ZOA,R33
C423	73	07	AND ZO7,R47
C426	88	E4	56 46 MOVD ZE456,R70 "RATING CEILING: "
C42A	ED		TRAP 18
C42B	F6		TRAP 9
C42C	8A	62	68 LDA @6268
C42F	E1	3D	JN LC46E
C431	12	2D	MOV R45,A
C433	E1	39	JN LC46E
C435	72	04	21 MOV ZO4,R33
C438	88	E1	8C 35 LC438 MOVD ZE18C,R53 "(ENTER THE RATING)"
			"(PASSWORD:)"
C43C	52	8C	MOV Z8C,B Put on lines 8 and 9
C43E	8E	C3	0D CALL @C30D
C441	8E	C5	91 CALL @C591
C444	8E	C5	84 CALL @C584
C447	E6	05	JNZ LC44E
C449	72	FF	2D MOV ZFF,R45
C44C	E0	D1	JMP LC41F
C44E	52	8C	LC44E MOV Z8C,B
C450	88	E8	A5 35 MOVD ZE8A5,R53 "
C454	8E	C3	1A CALL @C31A
C457	88	E1	B9 35 MOVD ZE1B9,R53 "(WRONG PASSWORD)"
C458	8E	C3	18 CALL @C318 Put on line 9
C45E	72	2D	42 MOV Z2D,R66
C461	F6		LC461 TRAP 9
C462	DA	42	FC DJNZ R66,LC461
C465	DA	2D	DO DJNZ R45,LC438
C468	72	03	2D MOV ZO3,R45
C46B	8C	D1	38 BR @D138
C46E	88	E8	A5 35 LC46E MOVD ZE8A5,R53 "
C472	52	8C	MOV Z8C,B Put on line 8
C474	8E	C3	1A CALL @C31A
C477	88	E2	E5 35 MOVD ZE2E5,R53 "<, >, OR 'ENTER')"
C47B	8E	C3	18 CALL @C318 Put on line 9
C47E	8A	62	53 LDA @6253
C481	8B	62	53 LC481 STA @6253
C484	EC		LC484 TRAP 19
C485	8E	C4	C3 LC485 CALL @C4C3
C488	F6		TRAP 9
C489	76	01	19 F8 BTJO ZO1,R25,LC485
C48D	77	01	1A 26 BTJZ ZO1,R26,LC4B7
C491	8A	62	55 LDA @6255
C494	2D	0A	CMP ZOA,A
C496	E6	11	JNZ LC4A9
C498	8A	62	53 LDA @6253
C49B	B6		XCHB A
C49C	8A	61	C6 LDA @61C6
C49F	23	07	AND ZO7,A
C4A1	3D	00	CMP R0,B
C4A3	E3	DF	JC LC484
C4A5	B6		XCHB A
C4A6	B3		INC A
C4A7	E0	D8	JMP LC481

1	C4A9	2D 0B	LC4A9 CMP %OB,A
2	C4AB	E6 D7	JNZ LC484
3	C4AD	8A 62 53	LDA @6253
4	C4B0	2D 01	CMP %01,A
5	C4B2	E2 D0	JZ LC484
6	C4B4	B2	DEC A
7	C4B5	E0 CA	JMP LC481
8	C4B7	42 2E 21	LC4B7 MOV R46,R33
9	C4BA	8A 62 16	LDA @6216
10	C4BD	B8	PUSH A
11	C4BE	8A 62 15	LDA @6215
12	C4C1	B8	PUSH A
13	C4C2	0A	RETS
14	C4C3	8A 62 2F	LC4C3 LDA @622F
15	C4C6	D0 2F	MOV A,R47
16	C4C8	8A 62 2E	LDA @622E Signal type code 1
17	C4CB	23 18	AND %18,A
18	C4CD	C0	MOV A,B
19	C4CE	7D FF 2C	CMP %FF,R44
20	C4D1	E6 0A	JNZ LC4DD
21	C4D3	C1	TSTB
22	C4D4	E6 2E	JNZ LC504
23	C4D6	B9	POP A
24	C4D7	B9	POP A
25	C4D8	B9	POP A
26	C4D9	B9	POP A
27	C4DA	8C CC D7	BR @CC07
28	C4DD	7D 7F 2C	LC4DD CMP %7F,R44
29	C4E0	E6 0D	JNZ LC4EF
30	C4E2	C1	TSTB
31	C4E3	E6 1F	JNZ LC504
32	C4E5	32 0F	MOV R15,B
33	C4E7	F5	TRAP 10
34	C4EB	AA 61 13	LDA @6113(B)
35	C4EB	D0 2F	MOV A,R47
36	C4ED	E0 15	JMP LC504
37	C4EF	32 24	LC4EF MOV R36,B
38	C4F1	F5	TRAP 10
39	C4F2	AA 61 13	LDA @6113(B)
40	C4F5	D0 2F	MOV A,R47
41	C4F7	7D 00 2C	CMP %00,R44
42	C4FA	E6 05	JNZ LC501
43	C4FC	8E D5 C7	CALL @D5C7
44	C4FF	E0 03	JMP LC504
45	C501	8E D5 E8	LC501 CALL @D5E8
46	C504	73 07 2F	LC504 AND %07,R47
47	C507	52 10	MOV %10,B Put on Line 1, col 15
48	C509	8A 62 53	LDA @6253 Program rating ceiling
49	C50C	8E D6 17	CALL @D617 Put rating in display memory
50	C50F	7D 00 1D	CMP %00,R29
51	C512	E2 49	JZ LC55D
52	C514	7D 00 2F	CMP %00,R47
53	C517	E2 44	JZ LC55D
54	C519	52 28	MOV %28,B Put on Line 3
55	C51B	88 E2 A9 35	MOVD %E2A9,R53 "PROGRAM RATING: "
56	C51F	8E C3 1A	CALL @C31A
57	C522	52 38	MOV %38,B Put on Line 3, col 17
58	C524	12 2F	MOV R47,A
59	C526	8E D6 17	CALL @D617 Put rating in display memory

C529	52 3C	MOV X3C,B Put on line 4
C52B	88 E8 A5 35	MOVD XE8A5,R53 "
C52F	8E C3 1A	CALL @C31A
C532	52 50	MOV X50,B Put on line 5
C534	88 E8 A5 35	MOVD XE8A5,R53 "
C538	88 E8 A5 46	MOVD XE8A5,R70 "
C53C	73 DF 20	AND XDF,R32
C53F	8A 62 53	LDA @6253 Program rating ceiling
C542	1D 2F	CMP R47,A
C544	E3 0B	JC LC551
C546	88 E2 C7 35	MOVD XE2C7,R53 " PROGRAM LOCKED OUT "
C54A	88 E2 D6 46	MOVD XE2D6,R70 "DUE TO RATING LEVEL"
C54E	74 20 20	OR X20,R32
C551	8E C3 1A	LC551 CALL @C31A
C554	52 64	MOV X64,B Put on line 6
C556	98 46 35	MOVD R70,R53
C559	8E C3 1A	CALL @C31A
C55C	0A	RETS
C55D	D5 2F	LC55D CLR R47
C55F	88 DE 80 35	MOVD XDE80,R53 " PROGRAM RATING "
C563	52 28	MOV X28,B Put on line 3
C565	8E C3 1A	CALL @C31A
C568	88 DE DA 35	MOVD XDEDA,R53 " NOT AVAILABLE "
C56C	52 3C	MOV X3C,B Put on line 4
C56E	8E C3 1A	CALL @C31A
C571	88 E8 A5 35	MOVD XE8A5,R53 "
C575	52 50	MOV X50,B Put on line 5
C577	8E C3 1A	CALL @C31A
C57A	88 E8 A5 35	MOVD XE8A5,R53 "
C57E	52 50	MOV X50,B Put on line 5
C580	8E C3 1A	CALL @C31A
C583	0A	RETS
C584	52 08	LC584 MOV X08,B
C586	AA 62 54	LC586 LDA @6254(B)
C589	AD 62 67	CMPA @6267(B)
C58C	E6 02	JNZ LC590
C58E	CA F6	DJNZ B,LC586
C590	0A	LC590 RETS
C591	22 AB	LC591 MOV XAB,A
C593	8B 62 7A	STA @627A
C596	72 08 19	MOV X08,R25
C599	D5 1A	CLR R26
C59B	52 08	MOV X08,B
C59D	8E F9 90	CALL @F990
C5A0	D9 40	POP R64
C5A2	D9 3F	POP R63
C5A4	B5	CLR A
C5A5	8B 62 5F	LC5A5 STA @625F
C5A8	88 1A 5E 42	MOVD X1A5E,R66
C5AC	8E C4 C3	LC5AC CALL @C4C3
C5AF	F6	TRAP 9
C5B0	7D 7F 2C	CMP X7F,R44
C5B3	E2 0E	JZ LC5C3
C5B5	12 1D	MOV R29,A
C5B7	E2 0A	JZ LC5C3
C5B9	12 2F	MOV R47,A
C5BB	8E D6 A7	CALL @D6A7
C5BE	E5 03	JPZ LC5C3

C5C0	8C D1 9A	BR @D19A
C5C3	12 1A	LC5C3 MOV R26,A
C5C5	8D 62 5F	CMPA @625F
C5C8	E6 DB	JNZ LC5A5
C5CA	DB 42	DEC0 R66
C5CC	E3 DE	JC LC5AC
C5CE	D5 19	CLR R25
C5D0	8C CE 15	BR @CE15

7 SETUP

C5D3	EA	LC5D3 TRAP 21
C5D4	72 01 21	MOV %01,R33
C5D7	72 C2 20	MOV %C2,R32
C5DA	22 0F	MOV %0F,A
C5DC	EE	TRAP 17
C5DD	F6	TRAP 9
C5DE	8E C6 78	CALL @C678
C5E1	88 DE F8 35	MOVD %DEF8,R53 "1: INSTALLATION " "2: UNIT SETTINGS " "3: RATING CEILING " "4: RATING PASSWORD "
C5E5	C5	CLR B Put on line 1
C5E6	72 14 10	MOV %14,R16 80 characters
C5E9	8E C3 1D	CALL @C31D
C5EC	32 24	MOV R36,B
C5EE	AA C6 67	LDA @C667(B)
C5F1	B8	PUSH A
C5F2	AA C6 63	LDA @C663(B)
C5F5	B8	PUSH A
C5F6	0A	RETS
C5F7	8E C3 18	LC5F7 CALL @C318
C5FA	F6	TRAP 9
C5FB	22 01	MOV %01,A
C5FD	EB	TRAP 20
C5FE	8A 62 55	LDA @6255
C601	32 24	MOV R36,B
C603	AD C6 1D	CMPA @C61D(B)
C606	E3 CB	JC LC5D3
C608	5D 01	CMP %01,B
C60A	E6 07	JNZ LC613
C60C	2D 05	CMP %05,A
C60E	E6 03	JNZ LC613
C610	8C D9 17	BR @D917
C613	C0	LC613 MOV A,B
C614	AA C6 21	LC614 LDA @C621(B)
C617	B8	PUSH A
C618	AA C6 2A	LDA @C62A(B)
C61B	B8	PUSH A
C61C	0A	RETS
C61D	05 06 08 09	LC61D DB >05,06,08,09
C621	C6	LC621 DB LC689/256 0 - Diagnostic Data
C622	C9	DB LC90F/256 1 - Installation
C623	C7	DB LC762/256 2 - Unit Settings
C624	C7	DB LC7DE/256 3 - Rating Ceiling
C625	C7	DB LC7E8/256 4 - Rating Password
C626	C7	DB LC7E8/256 5 - Purchase Password

C627 C8 DB LC8B4/256 6 - Account Balance
C628 DB DB LDB01/256 7 - Purchase History
C629 D9 DB LD917/256 8 - Data Report

0
1
2
3
4 C62A 89 LC62A DB LC689 MOD 256
5 C62B 0F DB LC90F MOD 256
6 C62C 62 DB LC762 MOD 256
7 C62D DE DB LC7DE MOD 256
8 C62E E8 DB LC7E8 MOD 256
9 C62F E8 DB LC7E8 MOD 256
10 C630 B4 DB LC8B4 MOD 256
11 C631 01 DB LDB01 MOD 256
12 C632 17 DB LD917 MOD 256
13
14 C633 88 DF 7F 35 LC633 MOVD %DF7F,R53 "(ENTER 1 TO 4)"
15 C637 E0 BE JMP LC5F7 Put on line 9
16
17 C639 88 DF 70 35 LC639 MOVD %DF70,R53 "(5: DATA REPORT)"
18 C63D 52 50 MOV %50,B Put on line 5
19 C63F 8E C3 1A CALL @C31A
20 C642 88 DF 8E 35 MOVD %DF8E,R53 "(ENTER 1 TO 5)"
21 C646 E0 AF JMP LC5F7
22
23 C648 8E C6 6B LC648 CALL @C66B
24 C64B 88 DF 9D 35 MOVD %DF9D,R53 "(ENTER 1 TO 7)"
25 C64F E0 A6 JMP LC5F7
26
27 C651 8E C6 6B LC651 CALL @C66B
28 C654 88 DF 61 35 MOVD %DF61,R53 "8: DATA REPORT "
29 C658 52 8C MOV %8C,B Put on line 8
30 C65A 8E C3 1A CALL @C31A
31 C65D 88 DF AC 35 MOVD %DFAC,R53 "(ENTER 1 TO 8)"
32 C661 E0 94 JMP LC5F7
33
34 C663 33 LC663 DB LC633 MOD 256
35 C664 39 DB LC639 MOD 256
36 C665 48 DB LC648 MOD 256
37 C666 51 DB LC651 MOD 256
38
39 C667 C6 LC667 DB LC633/256
40 C668 C6 DB LC639/256
41 C669 C6 DB LC648/256
42 C66A C6 DB LC651/256
43
44 C66B 88 DF 34 35 LC66B MOVD %DF34,R53 "5: PURCHASE PASSWORD"
45 "6: CREDIT DISPLAY "
46 "7: PURCHASE HISTORY "
47 C66F 52 50 MOV %50,B Put on line 5
48 C671 72 0F 10 MOV %OF,R16 60 characters
49 C674 8E C3 1D CALL @C31D
50 C677 OA RETS
51
52 C678 8A 62 23 LC678 LDA @6223
53 C67B D5 24 CLR R36
54 C67D 27 20 03 BTJZ %20,A,LC683
55 C680 72 02 24 MOV %02,R36
56 C683 27 08 02 LC683 BTJZ %08,A,LC688
57 C686 D3 24 INC R36
58 C688 OA LC688 RETS

Setup 0 - Diagnostic Data

C689	EA	LC689 TRAP 21
C68A	72 08 21	MOV %08,R33
C68B	22 0F	MOV %0F,A
C68F	EE	TRAP 17
C690	F6	LC690 TRAP 9
C691	52 14	MOV %14,B Put on line 2
C693	88 DE 08 35	MOVD %DE08,R53 " DIAGNOSTIC DATA "
C697	8E C3 1A	CALL @C31A
C69A	22 2E	MOV %2E,A "
C69C	52 50	MOV %50,B Start on line 5
C69E	72 63 3B	MOV %63,R59 Clear rest of screen
C6A1	8E C3 96	CALL @C396
C6A4	88 06 97 42	LC6A4 MOVD %0697,R66
C6A8	EC	TRAP 19
C6A9	F6	LC6A9 TRAP 9
C6AA	72 01 10	MOV %01,R16 4 characters
C6AD	88 F0 00 35	MOVD %F000,R53 "V2.4"
C6B1	52 3D	MOV %3D,B Put on line 4, col 2
C6B3	8E C3 1D	CALL @C31D
C6B6	88 61 F9 35	MOVD %61F9,R53
C6BA	72 06 10	MOV %06,R16 6 bytes
C6BD	52 65	MOV %65,B Put on line 6, col 2
C6BF	8E CA 8C	CALL @CA8C
C6C2	8A 67 E6	LDA @67E6
C6C5	52 76	MOV %76,B Put on line 7, col 19
C6C7	EF	TRAP 16
C6C8	F6	TRAP 9
C6C9	88 62 1A 35	MOVD %621A,R53
C6CD	72 08 10	MOV %08,R16 8 bytes
C6D0	52 79	MOV %79,B Put on line 7, col 2
C6D2	8E CA 8C	CALL @CA8C
C6D5	F6	TRAP 9
C6D6	12 15	MOV R21,A
C6D8	52 8D	MOV %8D,B Put on line 8, col 2
C6DA	EF	TRAP 16
C6DB	8A 62 33	LDA @6233
C6DE	F0	TRAP 15
C6DF	8A 62 26	LDA @6226
C6E2	52 92	MOV %92,B Put on line 8, col 7
C6E4	EF	TRAP 16
C6E5	8A 62 46	LDA @6246
C6E8	52 97	MOV %97,B Put on line 8, col 12
C6EA	EF	TRAP 16
C6EB	8A 62 47	LDA @6247 Service ID
C6EE	F0	TRAP 15
C6EF	12 06	MOV R6,A
C6F1	52 9E	MOV %9E,B Put on line 8, col 19
C6F3	EF	TRAP 16
C6F4	F6	TRAP 9
C6F5	80 1C	MOVP P28,A Read U24 data (>011C)
C6F7	B8	PUSH A
C6F8	23 01	AND %01,A
C6FA	52 A1	MOV %A1,B Put on line 9, col 2
C6FC	EF	TRAP 16
C6FD	B9	POP A
C6FE	BD	RRC A
C6FF	52 A6	MOV %A6,B Put on line 9, col 7

14112.0.B.

C701	EF	TRAP 16
C702	8A 62 2E	LDA @622E Get signal type code
C705	CO	MOV A,B
C706	CE	RL B
C707	C7	SWAP B
C708	53 03	AND %03,B
C70A	AA C7 59	LDA @C759(B) "SUFB"
C70D	52 AB	MOV %AB,B Put on line 9, col 12
C70F	F3	TRAP 12 Write A @B in display memory
C710	32 1D	MOV R29,B Get signal type code 2
C712	53 7F	AND %7F,B
C714	AA C7 5D	LDA @C75D(B) "MEBLA"
C717	F2	TRAP 13 Write A to display memory
C718	52 AE	MOV %AE,B Put on line 9, col 15
C71A	8A 62 32	LDA @6232
C71D	EF	TRAP 16
C71E	8A 62 31	LDA @6231
C721	F0	TRAP 15
C722	8A 62 30	LDA @6230
C725	F0	TRAP 15
C726	DB 42	DECD R66
C728	E7 2C	JNC LC756
C72A	12 19	MOV R25,A
C72C	E2 03	JZ LC731
C72E	8C C6 A9	BR @C6A9
C731	12 1A	LC731 MOV R26,A
C733	E2 09	JZ LC73E
C735	8C C6 A4	BR @C6A4
C738	88 F1 38 35	MOVD %F138,R53
C73C	9C 35	BR *R53
C73E	88 62 1F 35	LC73E MOVD %621F,R53
C742	52 06	MOV %06,B
C744	B5	CLR A
C745	9B 35	LC745 STA *R53
C747	DB 35	DECD R53
C749	CA FA	DJNZ B,LC745
C74B	22 FF	MOV %FF,A
C74D	8B 62 20	STA @6220
C750	8B 62 21	STA @6221
C753	8C C6 90	BR @C690
C756	8C CE 15	LC756 BR @CE15
C759	15 17 05 01	LC759 DB >15,17,05,01 "SUFB"
C75D	0C 04 01 0B	LC75D DB >0C,04,01,0B,00 "MEBLA"

Setup 2 - Unit Settings

C762	EA	LC762 TRAP 21
C763	72 0B 21	MOV %0B,R33
C766	88 E3 90 46	MOVD %E390,R70 " AUDIO MODE IS "

" (PRESS '1' FOR) "

" MESSAGE PROMPT IS "

" (PRESS '2' TO) "

14112 G.B.
 C76A ED TRAP 18
 C76B F6 TRAP 9
 C76C 88 DF E8 35 LC76C MOVD XDFE8,R53 " PRIMARY "
 C770 88 DF F7 46 MOVD Xdff7,R70 "(ALTERNATE)"
 C774 8A 62 78 LDA @6278
 C777 27 01 08 BTJZ X01,A,LC782
 C77A 88 DF D9 35 MOVD XDFD9,R53 " ALTERNATE "
 C77E 88 EO 06 46 MOVD XE006,R70 "(PRIMARY)"
 C782 52 14 LC782 MOV X14,B Put on line 2
 C784 8E C3 1A CALL @C31A
 C787 98 46 35 MOVD R70,R53
 C78A 52 3C MOV X3C,B Put on line 4
 C78C 8E C3 1A CALL @C31A
 C78F 8A 62 78 LDA @6278
 C792 27 02 0A BTJZ X02,A,LC79F
 C795 88 EO 42 35 MOVD XE042,R53 " DISABLED "
 C799 88 EO 51 46 MOVD XE051,R70 "(ENABLE)"
 C79D EO 08 JMP LC7A7
 C79F 88 EO 33 35 LC79F MOVD XE033,R53 " ENABLED "
 C7A3 88 EO 60 46 MOVD XE060,R70 "(DISABLE)"
 C7A7 52 78 LC7A7 MOV X78,B Put on line 7
 C7A9 8E C3 1A CALL @C31A
 C7AC 98 46 35 MOVD R70,R53
 C7AF 52 A0 MOV XAO,B Put on line 9
 C7B1 8E C3 1A CALL @C31A
 C7B4 22 01 MOV X01,A
 C7B6 EB TRAP 20
 C7B7 F6 LC7B7 TRAP 9
 C7B8 12 1A MOV R26,A
 C7BA E6 03 JNZ LC7BF
 C7BC 8C C5 D3 BR @C5D3
 C7BF 8A 62 55 LC7BF LDA @6255
 C7C2 B2 DEC A
 C7C3 E2 0B JZ LC7D0
 C7C5 B2 DEC A
 C7C6 E2 02 JZ LC7CA
 C7C8 EO ED JMP LC7B7
 C7CA 88 00 02 01 LC7CA MOVD X0002,R1
 C7CE EO 04 JMP LC7D4
 C7D0 88 00 01 01 LC7D0 MOVD X0001,R1
 C7D4 8A 62 78 LC7D4 LDA @6278
 C7D7 65 XOR B,A
 C7D8 8B 62 78 STA @6278
 C7DB 8C C7 60 BR @C76C

Setup 3 - Rating Ceiling

C7DE 8A 62 54 LC7DE LDA @6254
 C7E1 C0 MOV A,B
 C7E2 8E C4 0C CALL @C40C
 C7E5 8C C5 D3 BR @C5D3

Setup 4 + 5 - Rating and Purchase Password

C7E8 5A 05 LC7E8 SUB X05,B
 C7EA D1 27 MOV B,R39
 C7EC 72 03 26 MOV X03,R38

C7EF EA LC7EF TRAP 21
C7F0 72 04 21 MOV X04,R33
C7F3 88 E3 A2 46 MOVD XE3A2,R70 " ENTER THE OLD "
" PURCHASE PASSWORD "

" 1-8 DIGITS "
" PLUS 'ENTER' "

C7F7 88 62 60 35 " (PASSWORD:)"
MOVD X6260,R53
C7FB 12 27 MOV R39,A
C7FD E2 08 JZ LC807
C7FF 88 E3 C6 46 MOVD XE3C6,R70 " ENTER THE OLD "
" PROGRAM RATING "
" PASSWORD "

" 1-8 DIGITS "
" PLUS 'ENTER' "

C803 88 62 68 35 " (PASSWORD:)"
MOVD X6268,R53
C807 9A 35 LC807 LDA *R53
C809 E1 2C JN LC837
C80B ED TRAP 18
C80C F6 TRAP 9
C80D 22 08 LC80D MOV X08,A
C80F 52 AB MOV XAB,B
C811 EB TRAP 20
C812 12 27 MOV R39,A
C814 E6 05 JNZ LC81B
C816 8E D6 9A CALL @D69A
C819 E0 03 JMP LC81E
C81B 8E C5 84 LC81B CALL @C584
C81E E2 17 LC81E JZ LC837
C820 72 21 42 MOV X21,R66
C823 88 E1 B9 35 MOVD XE1B9,R53 " (WRONG PASSWORD)"
C827 8E C3 18 CALL @C318
C82A F6 LC82A TRAP 9
C82B DA 42 FC DJNZ R66,LC82A
C82E DA 26 BE DJNZ R38,LC7EF
C831 72 03 26 MOV X03,R38
C834 8C D1 38 BR @D138
C837 EA LC837 TRAP 21
C838 72 0E 21 MOV X0E,R33
C83B 12 27 MOV R39,A
C83D E2 08 JZ LC847
C83F 88 E3 D8 46 MOVD XE3D8,R70 " ENTER A NEW "
" PROGRAM RATING "
" PASSWORD "

" 0-8 DIGITS "
" PLUS 'ENTER' "

C843 ED " (PASSWORD:)"
TRAP 18
C844 F6 TRAP 9

C845 E0 06 JMP LC84D
C847 88 E3 B4 46 LC847 MOVD %E3B4,R70 " ENTER A NEW "
" PURCHASE PASSWORD "

" 0-8 DIGITS "
" PLUS 'ENTER' "

" (PASSWORD:) "

C848 ED TRAP 18
C84C F6 TRAP 9
C84D 22 08 LC84D MOV Z08,A
C84F 52 AB MOV ZAB,B

C851 EB TRAP 20
C852 52 08 MOV Z08,B
C854 AA 62 54 LC854 LDA @6254(B)
C857 AB 62 6F STA @626F(B)
C85A CA F8 DJNZ B,LC854
C85C EA TRAP 21
C85D 72 04 21 MOV Z04,R33
C860 88 E3 EA 46 MOVD %E3EA,R70 " REENTER THE NEW "
" PASSWORD "
" FOR VERIFICATION "

" 0-8 DIGITS "
" PLUS 'ENTER' "

" (PASSWORD:) "

C864 ED TRAP 18
C865 F6 TRAP 9
C866 22 08 MOV Z08,A
C868 52 AB MOV ZAB,B
C86A EB TRAP 20
C86B 52 08 MOV Z08,B
C86D AA 62 54 LC86D LDA @6254(B)
C870 AD 62 6F CMPA @626F(B)
C873 E6 2C JNZ LC8A1
C875 CA F6 DJNZ B,LC86D
C877 EA TRAP 21
C878 72 04 21 MOV Z04,R33
C87B 52 08 MOV Z08,B
C87D 12 27 MOV R39,A
C87F E6 10 JNZ LC891
C881 AA 62 6F LC881 LDA @626F(B)
C884 AB 62 5F STA @625F(B)
C887 CA F8 DJNZ B,LC881
C889 88 E4 0E 46 MOVD %E40E,R70
" PURCHASE PASSWORD "
" HAS BEEN CHANGED "

C88D ED TRAP 18
C88E F6 TRAP 9
C88F E0 19 JMP LC8AA
C891 AA 62 6F LC891 LDA @626F(B)
C894 AB 62 67 STA @6267(B)
C897 CA F8 DJNZ B,LC891
C899 88 E3 FC 46 MOVD %E3FC,R70

" PROGRAM RATING "
" PASSWORD "
" HAS BEEN CHANGED "

C89D ED TRAP 18
C89E F6 TRAP 9
C89F E0 09 JMP LC8AA
C8A1 EA LC8A1 TRAP 21
C8A2 72 04 21 MOV %04,R33
C8A5 88 E4 20 46 MOVD XE420,R70
" THE NEW PASSWORDS "
" WERE DIFFERENT."
"PASSWORD NOT CHANGED"

C8A9 ED TRAP 18
C8AA 72 2D 42 LC8AA MOV %2D,R66
C8AD F6 LC8AD TRAP 9
C8AE DA 42 FC DJNZ R66,LC8AD
C8B1 8C C5 D3 BR @C5D3

Setup 6 - Account Balance

C8B4 EA LC8B4 TRAP 21
C8B5 72 0C 21 MOV %0C,R33
C8B8 22 FF MOV %FF,A
C8BA 8B 62 2B STA @622B
C8BD 88 C1 74 37 MOVD XC174,R55
C8C1 F6 LC8C1 TRAP 9
C8C2 8A 62 2B LDA @622B
C8C5 E6 FA JNZ LC8C1
C8C7 88 E4 32 46 MOVD XE432,R70
"CREDIT: "

"CREDIT VERIFICATION:"

C8CB ED TRAP 18
C8CC F6 TRAP 9
C8CD 8E D6 2D CALL @D62D
C8D0 8E D6 74 CALL @D674
C8D3 52 1C MOV %1C,B Put on Line 2, col 9
C8D5 8E CA 56 CALL @CA56
C8D8 F6 TRAP 9
C8D9 88 62 3D 35 MOVD X623D,R53 Credit verification
C8DD 72 08 10 MOV %08,R16 8 bytes
C8E0 52 78 MOV %78,B Put on Line 7
C8E2 8E CA 8C CALL @CA8C
C8E5 12 23 MOV R35,A >OE
C8E7 F0 TRAP 15
C8E8 12 24 MOV R36,A >AO
C8EA F0 TRAP 15
C8EB 22 2E MOV %2E,A ?
C8ED F2 TRAP 13 Write A to display memory
C8EE 88 62 3D 35 MOVD X623D,R53 Credit verification
C8F2 72 08 10 MOV %08,R16 8 bytes
C8F5 8E CA B5 CALL @CAB5 Build checksum ?
C8F8 88 00 23 35 MOVD X0023,R53 R52,53=>0023
C8FC 72 02 10 MOV %02,R16 2 bytes
C8FF 8E CA B8 CALL @CAB8 Build checksum ?
C902 F0 TRAP 15 Put on Line 8, col 6

C903	88 1A 5E 42	MOVD %1A5E,R66 6750
C907	F6	LC907 TRAP 9
C908	DB 42	DECD R66
C90A	E3 FB	JC LC907
C90C	8C CE 15	BR @CE15

Setup 1 - Installation

C90F	EA	LC90F TRAP 21
C910	72 00 21	MOV %00,R33
C913	42 1D 24	MOV R29,R36
C916	8A 62 23	LDA @6223
C919	23 10	AND %10,A
C91B	DO 25	MOV A,R37
C91D	88 E4 78 46	MOVD %E478,R70 "UNIT:" "
		"SIGNAL LEVEL: "
		"SERVICE ID: "
		"LOCATION: "
C921	E0	TRAP 18
C922	88 06 97 42	MOVD %0697,R66
C926	F6	LC926 TRAP 9
C927	F6	TRAP 9
C928	DB 42	DECD R66
C92A	E3 03	JC LC92F
C92C	8C CE 15	BR @CE15
C92F	88 62 35 35	LC92F MOVD %6235,R53 Serial number
C933	72 05 10	MOV %05,R16 5 bytes (01,00,80,63,FF)
C936	52 06	MOV %06,B Put on line 1, col 7
C938	8E CA 8C	CALL @CA8C
C93B	88 62 35 35	MOVD %6235,R53 Serial number
C93F	72 05 10	MOV %05,R16 5 bytes
C942	8E CA B5	CALL @CAB5 Build checksum ?
C945	F0	TRAP 15 Put on line 1, col 19
C946	F6	TRAP 9
C947	8A 62 19	LDA @6219
C94A	DO 3A	MOV A,R58
C94C	E6 14	JNZ LC962
C94E	D5 27	CLR R39
C950	8E CA 0F	CALL @CA0F
C953	72 07 10	MOV %07,R16 28 characters
C956	88 E3 7B 35	MOVD %E37B,R53 ":" NO VIDEOCIPHER SIGNAL"
C95A	52 34	MOV %34,B Put on line 3, col 13
C95C	8E C3 1D	CALL @C31D
C95F	8C C9 E3	BR @C9E3
C962	12 27	LC962 MOV R39,A
C964	E6 0A	JNZ LC970
C966	22 2E	MOV %2E,A "
C968	72 19 3B	MOV %19,R59
C96B	52 36	MOV %36,B Put on line 3, col 15
C96D	8E C3 96	CALL @C396
C970	42 3A 27	LC970 MOV R58,R39
C973	D5 3E	CLR R62
C975	8E D6 74	CALL @D674
C978	12 3A	MOV R58,A

C97A	52 36	MOV %36,B Put on Line 3, col 15
C97C	8E F0 D5	CALL @F0D5
C97F	22 37	MOV %37,A //
C981	F2	TRAP 13 Write A to display memory
C982	8A 62 18	LDA @6218
C985	CO	MOV A,B
C986	8A 62 17	LDA @6217
C989	BD	RRC A
C98A	CD	RRC B
C98B	BD	RRC A
C98C	CD	RRC B
C98D	BD	RRC A
C98E	CD	RRC B
C98F	BD	RRC A
C990	CD	RRC B
C991	D1 3A	MOV B,R58
C993	D5 3E	CLR R62
C995	8E D6 74	CALL @D674
C998	12 3A	MOV R58,A
C99A	52 39	MOV %39,B Put on Line 3, col 18
C99C	8E F0 D5	CALL @F0D5
C99F	52 3C	MOV %3C,B Put on Line 4
C9A1	88 E8 A5 35	MOVD XE8A5,R53 //
C9A5	8E C3 1A	CALL @C31A
C9A8	4D 1D 24	CMP R29,R36
C9AB	E6 0B	JNZ LC9B8
C9AD	8A 62 23	LDA @6223
C9B0	23 10	AND %10,A
C9B2	1D 25	CMP R37,A
C9B4	E2 08	JZ LC9BE
C9B6	D0 25	MOV A,R37
C9B8	42 1D 24	LC9B8 MOV R29,R36
C9BB	8E CA 0F	CALL @CA0F
C9BE	12 25	LC9BE MOV R37,A
C9C0	E6 0E	JNZ LC9D0
C9C2	88 E3 69 35	MOVD XE369,R53 "NONE"
C9C6	72 01 10	MOV %01,R16 4 characters
C9C9	52 5C	MOV %5C,B Put on Line 5, col 13
C9CB	8E C3 1D	CALL @C31D
C9CE	E0 0A	JMP LC9DA
C9D0	8A 62 47	LC9D0 LDA @6247 Get service ID
C9D3	52 5C	MOV %5C,B Put on Line 5, col 13
C9D5	EF	TRAP 16
C9D6	12 1D	MOV R29,A
C9D8	E6 09	JNZ LC9E3
C9DA	88 E3 6C 35	LC9DA MOVD XE36C,R53 " NEEDS AUTHORIZATION"
C9DE	52 64	MOV %64,B Put on Line 6
C9E0	8E C3 1A	CALL @C31A
C9E3	F6	LC9E3 TRAP 9
C9E4	88 61 F8 46	MOVD %61F8,R70 Location table
C9E8	52 06	MOV %06,B 6 entries
C9EA	88 E3 5D 35	MOVD XE35D,R53 "SET "
C9EE	D5 26	CLR R38
C9F0	D3 46	LC9F0 INC R70
C9F2	79 00 45	ADC %00,R69
C9F5	9A 46	LDA +R70
C9F7	44 00 26	OR R0,R38
C9FA	CA F4	DJNZ B,LC9F0
C9FC	12 26	MOV R38,A Any location ?

1	C9FE	E6 04	JNZ LCA04
2	CA00	88 E3 63 35	MOVD %E363,R53 "NOT SET "
3	CA04	72 02 10	LCA04 MOV X02,R16 8 characters
4	CA07	52 82	MOV X82,B Put on line 7, col 11
5	CA09	8E C3 1D	CALL @C31D
6	CA0C	8C C9 26	BR @C926
7	CA0F	52 5C	LCA0F MOV %5C,B Put on line 5, col 13
8	CA11	22 2E	MOV X2E,A "
9	CA13	72 1B 3B	MOV X1B,R59
10	CA16	8E C3 96	CALL @C396
11	CA19	0A	RETS
12	# CALLED BY INT3		
13	CA1A	12 22	LCA1A MOV R34,A
14	CA1C	E6 01	JNZ LCA1F
15	CA1E	0A	RETS
16	CA1F	2A 46	LCA1F SUB %46,A
17	CA21	E5 02	JPZ LCA25
18	CA23	22 01	MOV X01,A
19	CA25	8B 62 19	LCA25 STA @6219
20	CA28	D0 22	MOV A,R34
21	CA2A	8A 62 18	LDA @6218
22	CA2D	CD	MOV A,B
23	CA2E	8A 62 17	LDA @6217
24	CA31	D0 34	MOV A,R52 # THE CODE FROM HERE THRU NEXT 9 LINES APP-
25	CA33	D1 35	MOV B,R53 # EARS USELESS
26	CA35	BD	RRC A
27	CA36	CD	RRC B
28	CA37	BD	RRC A
29	CA38	CD	RRC B
30	CA39	BD	RRC A
31	CA3A	CD	RRC B
32	CA3B	BD	RRC A
33	CA3C	CD	RRC B
34	CA3D	4A 01 35	SUB R1,R53
35	CA40	7B 00 34	SBB X00,R52
36	CA43	48 22 35	ADD R34,R53
37	CA46	79 00 34	ADC X00,R52
38	CA49	12 35	MOV R53,A
39	CA4B	8B 62 18	STA @6218
40	CA4E	12 34	MOV R52,A
41	CA50	8B 62 17	STA @6217
42	CA53	D5 22	CLR R34
43	CA55	0A	RETS
44	CA56	C2	LCA56 DEC B
45	CA57	22 2E	MOV X2E,A "
46	CA59	F3	TRAP 12 Write A @B in display memory
47	CA5A	C5	CLR B
48	CA5B	12 3E	MOV R62,A Thousands and hundreds digits
49	CA5D	B7	SWAP A
50	CA5E	8E CA 7A	CALL @CA7A Write low nibble to display
51	CA61	12 3E	MOV R62,A
52	CA63	8E CA 7A	CALL @CA7A Write high nibble to display
53	CA66	12 3A	MOV R58,A Tens and ones digits
54	CA68	B7	SWAP A
55	CA69	8E CA 7A	CALL @CA7A

CA6C 52 FF MOV %FF,B
CA6E 12 3A MOV R58,A
CA70 8E CA 7A CALL @CA7A
CA73 22 2D MOV %2D,A ??
CA75 F2 TRAP 13 Write A to display memory

CA76 12 3B MOV R59,A Cents digits
CA78 F0 TRAP 15
CA79 0A RETS

CA7A 23 0F LCA7A AND %0F,A Get low nibble
CA7C E6 03 JNZ LCA81

CA7E C1 TSTB
CA7F E2 05 JZ LCA86
CA81 52 FF LCA81 MOV %FF,B

CA83 28 20 ADD %20,A Make A '0-9'
CA85 F2 TRAP 13 Write A to display memory
CA86 0A LCA86 RETS

CA87 72 04 3A MOV %04,R58
CA8A E0 03 JMP LCA8F

CA8C 72 02 3A LCA8C MOV %02,R58
CA8F 42 3A 3B LCA8F MOV R58,R59
CA92 12 10 MOV R16,A
CA94 E6 01 JNZ LCA97

CA96 0A RETS
CA97 9A 35 LCA97 LDA *R53
CA99 EF TRAP 16
CA9A D2 3B DEC R59
CA9C D3 35 LCA9C INC R53

CA9E 79 00 34 ADC %00,R52
CAA1 D2 10 DEC R16
CAA3 E6 01 JNZ LCAA6
CAA5 0A RETS
CAA6 9A 35 LCAA6 LDA *R53
CAA8 F0 TRAP 15

4 CAA9 D2 3B DEC R59
5 CAAB E6 EF JNZ LCA9C
6 CAAD 22 2E MOV %2E,A ;
7 CAAF F2 TRAP 13 ;Write A to display memory
8 CAB0 42 3A 3B MOV R58,R59
9 CAB3 E0 E7 JMP LCA9C

10 ;
11 CAB5 72 FF 3B LCAB5 MOV %FF,R59
12 CAB8 9A 35 LCAB8 LDA *R53
13 CABA 52 08 MOV %08,B
14 CABC 45 00 3B LCABC XOR R0,R59
15 CABF 23 7F AND %7F,A
16 CAC1 45 00 3B XOR R0,R59
17 CAC4 BE RL A
18 CAC5 DE 3B RL R59
19 CAC7 E7 03 JNC LCACC
20 CAC9 75 9A 3B XOR %9A,R59
21 CACC CA EE LCACC DJNZ B,LCABC
22 CACE D3 35 INC R53
23 CAD0 79 00 34 ADC %00,R52
24 CAD3 DA 10 E2 DJNZ R16,LCABS
25 CAD6 12 3B MOV R59,A
26 CAD8 0A RETS
27 ;
28 ; TEXT
29 ;
30 CAD9 EA LCAD9 TRAP 21

31 CADA 72 05 21 MOV %05,R33
32 CADD B5 CLR A
33 CADE 8B 62 7F STA @L627F
34 CAE1 8B 62 80 STA @L6280
35 CAE4 8B 62 81 STA @L6281
36 CAE7 22 FF MOV %FF,A
37 CAE9 8B 63 10 STA @L6310
38 CAEC 8B 63 0F STA @L630F
39 CAEF 72 47 20 MOV %47,R32
40 CAF2 22 0F MOV %0F,A
41 CAF4 EE TRAP 17
42 CAF5 F6 TRAP 9
43 CAF6 72 FF 28 MOV %FF,R40
44 CAF9 B5 CLR A
45 CAFA D0 25 LCAFA MOV A,R37
46 CAFC 88 CB 3B 4C LCAF C MOVD %CB3B,R76
47 CB00 72 05 21 MOV %05,R33
48 CB03 8E CC AB CALL @LCCAB
49 CB06 8E CC 13 CALL @LCC13
50 CB09 88 1A 5E 42 MOVD %1A5E,R66 ;
51 CB0D 52 AC LCB0D MOV %AC,B
52 CBOF 8E CC 8D CALL @LCC8D
53 CB12 DB 42 DECD R66
54 CB14 E7 0C JNC LCB22
55 CB16 8A 63 10 LDA @L6310
56 CB19 E6 0A JNZ LCB25
57 CB1B 8A 63 11 LDA @L6311
58 CB1E E2 27 JZ LCB47
59 CR20 F0 03 JMP LCB25

CB22 8C CE 15
CB25 EC
CB26 F6

LCB22 BR @LCE1
LCB25 TRAP 19
TRAP 9

CB27	76 01 19 E2	BTJO Z01,R25,LCBOD
CB2B	77 01 1A DE	BTJZ Z01,R26,LCBOD
CB2F	22 OC	MOV %OC,A
CB31	8D 62 55	CMPA @L6255
CB34	E6 D7	JNZ LCBOD
CB36	8A 62 81	LDA @L6281
CB39	E0 2D	JMP LCB68
CB3B	72 05 21	LCB3B MOV %05,R33
CB3E	76 80 28 BA	BTJO Z80,R40,LCAFC
CB42	8A 62 80	LDA @L6280
CB45	E0 B3	JMP LCAFA
CB47	D5 28	LCB47 CLR R40
CB49	12 25	MOV R37,A
CB4B	8B 62 80	STA @L6280
CB4E	22 2E	MOV %2E,A ;" "
CB50	8E C3 8D	CALL @LC38D
CB53	F6	TRAP 9
CB54	88 63 0F 46	MOVD %630F,R70
CB58	8E C3 A7	CALL @LC3A7
CB5B	F6	TRAP 9
CB5C	8A 63 13	LDA @L6313
CB5F	8B 62 7F	STA @L627F
CB62	8A 63 12	LDA @L6312
CB65	8B 62 81	STA @L6281
CB68	DD 25	LCB68 MOV A,R37
CB6A	D5 27	CLR R39
CB6C	8E CC 13	CALL @LC0C13
CB6F	88 CB 3B 4C	MOVD %CB3B,R76 ;
CB73	88 E1 7D 35	MOVD %E17D,R53 ;"(<,>, PAGE NUMBER)"
CB77	8E C3 18	CALL @LC318
CB7A	F6	TRAP 9
CB7B	52 03	MOV %03,B
CB7D	B5	CLR A
CB7E	AB 62 7A	LCB7E STA @L627A(B)
CB81	CA FB	DJNZ B,LCB7E
CB83	D5 26	CLR R38
CB85	88 1A 5E 42	LCB85 MOVD %1A5E,R66 ;
CB89	76 FF 27 OC	LCB89 BTJO ZFF,R39,LCB99
CB8D	8A 63 10	LDA @L6310
CB90	E6 07	JNZ LCB99
CB92	8A 63 11	LDA @L6311
CB95	E6 02	JNZ LCB99
CB97	D3 27	INC R39
CB99	EC	LCB99 TRAP 19
CB9A	F6	TRAP 9
CB9B	76 01 19 06	BTJO Z01,R25,LCBA5
CB9F	76 01 1A 09	BTJO Z01,R26,LCBAC
CBA3	E0 E0	JMP LCB85
CBA5	DB 42	LCBA5 DECD R66
CBA7	E3 E0	JC LCB89
CBA9	8C CE 15	BR @LCCE15
CBAC	8A 62 55	LCBAC LDA @L6255
CBAF	2D OC	CMP %OC,A
CBB1	E6 06	JNZ LCBB9
CBB3	32 26	MOV R38,B
CBB5	E2 CE	JZ LCB85
CBB7	E0 24	JMP LCBDD
CBB9	2D 0A	LCBB9 CMP %0A,A
CBBC	E7 14	JNC LCBD1

CBBD	76	FF	26	C4	BTJO %FF, R38, LCB85
CBC1	2D	0B			CMP %OB, A
CBC3	E2	06			JZ LCB8B
CBC5	8A	62	81		LDA @L6281
CBC8	8C	CA	FA		BR @LCFAFA
CBCB	8A	62	7F		LCBCB LDA @L627F
CBCE	8C	CA	FA		BR @LCFAFA
CBD1	12	26			LCBD1 MOV R38, A
CBD3	E6	08			JNZ LCBDD
CBD5	88	E1	23	35	MOVD %E123, R53 ;" (PAGE:) "
CBD9	8E	C3	18		CALL @LC318
CBDC	F6				TRAP 9
CBDD	8E	CC	26		LCBDD CALL @LCC26
CBE0	32	23			MOV R35, B
CBE2	E6	0B			JNZ LCBEF
CBE4	32	26			MOV R38, B
CBE6	E2	15			JZ LCBFD
CBE8	5D	03			CMP %03, B
CBEA	E2	17			JZ LCC03
CBEC	8C	CB	85		BR @LCB85
CBEF	72	21	42		LCBEF MOV %21, R66
CBF2	88	E1	32	35	MOVD %E132, R53 ;" (NUMBER TOO LARGE) "
CBF6	8E	C3	18		CALL @LC318
CBF9	F6				LCBF9 TRAP 9
CBFA	DA	42	FC		IJNZ R66, LCBF9
CBFD	8A	62	81		LCBFD LDA @L6281
CC00	8C	CB	68		BR @LCB68
CC03	D5	26			LCC03 CLR R38
CC05	12	24			MOV R36, A
CC07	76	80	28	05	BTJO %80, R40, LCC10
CC0B	8D	62	80		CMPA @L6280
CC0E	E2	ED			JZ LCBFD
CC10	8C	CA	FA		LCC10 BR @LCFAFA
CC13	8A	63	0F		LCC13 LDA @L630F
CC16	4D	00	25		CMP R0, R37
CC19	E2	0A			JZ LCC25
CC1B	12	25			MOV R37, A
CC1D	8B	63	0F		STA @L630F
CC20	22	FF			MOV %FF, A
CC22	8B	63	10		STA @L6310
CC25	0A				LCC25 RETS
CC26	22	0C			LCC26 MOV %0C, A
CC28	8D	62	55		CMPA @L6255
CC2B	E6	0D			JNZ LCC3A
CC2D	12	26			MOV R38, A
CC2F	E2	27			JZ LCC58
CC31	D2	26			DEC R38
CC33	22	2E			MOV %2E, A ;" "
CC35	32	26			MOV R38, B
CC37	E6	17			JNZ LCC50
CC39	0A				RETS
CC3A	72	FF	23		LCC3A MOV %FF, R35
CC3D	8E	CC	59		CALL @LCC59
CC40	32	23			MOV R35, B
CC42	E6	14			JNZ LCC58
CC44	32	26			MOV R38, B
CC46	8A	62	55		LDA @L6255
CC49	AB	62	7B		STA @L627B(B)
CC4C	28	20			ADD %20, A

CC4E D3 26 INC R38
 CC50 58 A9 LCC50 ADD %A9,B
 CC52 F3 TRAP 12 ;Write A @B in display memory
 CC53 D5 23 CLR R35
 CC55 8E CC 59 CALL @LCC59
 CC58 0A LCC58 RETS
 ;
 CC59 32 26 LCC59 MOV R38,B
 CC5B 77 FF 23 0A BTJZ %FF,R35,LCC69
 CC5F D5 23 CLR R35
 CC61 8A 62 55 LDA @L6255
 CC64 D0 24 MOV A,R36
 CC66 C1 TSTB
 CC67 E0 06 JMP LCC6F
 CC69 AA 62 7A LCC69 LDA @L627A(B)
 CC6C D0 24 MOV A,R36
 CC6E C2 DEC B
 CC6F E2 1B LCC6F JZ LCC8C
 CC71 C8 PUSH B
 CC72 AA 62 7A LDA @L627A(B)
 CC75 2C 0A MPY %0A,A ;A=A*10
 ;
 CC77 48 01 24 ADD R1,R36
 CC7A 49 00 23 ADC R0,R35
 CC7D C9 POP B
 CC7E C2 DEC B
 CC7F E2 0B JZ LCC8C
 CC81 AA 62 7A LDA @L627A(B)
 CC84 2C 64 MPY %64,A ;A=A*100
 CC86 48 01 24 ADD R1,R36
 CC89 49 00 23 ADC R0,R35
 CC8C 0A LCC8C RETS
 ;
 CC8D 8A 62 30 LCC8D LDA @L6230
 CC90 4D 00 2B CMP R0,R43
 CC93 E2 12 JZ LCCA7
 CC95 D0 2B MOV A,R43
 CC97 38 2A ADD R42,B
 CC99 22 2E MOV %2E,A ;"
 CC9B F3 TRAP 12 ;Write A @B in display memory
 CC9C D3 2A INC R42
 CC9E 7D 05 2A CMP %05,R42
 CCA1 E3 05 JC LCCAB
 CCA3 C3 INC B
 CCA4 22 2D MOV %2D,A ;"
 CCA6 F3 TRAP 12 ;Write A @B in display memory
 CCA7 0A LCCA7 RETS
 CCA8 D5 2A LCCA8 CLR R42
 CCAA 0A RETS
 ;
 CCAB 88 E1 23 35 LCCAB MOVD %E123,R53 ;"(PAGE:)"
 CCAF 8E C3 18 CALL @LC318
 CCB2 52 A9 MOV %A9,B ;Start on line 9, col 10
 CCB4 8E CC B8 CALL @LCCCB8
 CCB7 0A RETS
 ;
 CCB8 42 25 23 LCCB8 MOV R37,R35
 CCBB 22 1F MOV %1F,A
 CCBD B3 LCCBD INC A
 CCBE 7A 64 23 SUB %64,R35 ;R35=R35-100

CD43	E6 04	JNZ LCD49
CD45	76 01 1F 06	BTJO %01,R31,LCD4F
CD49	74 05 1F	LCD49 OR %05,R31
CD4C	8C D1 9A	BR @LD19A
CD4F	7D 01 1D	LCD4F CMP %01,R29
CD52	E2 47	JZ LCD9B
CD54	8A 62 8D	LDA @L628D
CD57	E6 4B	JNZ LCDA4
CD59	8A 62 8E	LDA @L628E
CD5C	E2 3D	JZ LCD9B
CD5E	8A 61 E7	LDA @L61E7
CD61	E2 38	JZ LCD9B
CD63	8D 62 33	CMPA @L6233
CD66	E6 33	JNZ LCD9B
CD68	8A 62 8B	LDA @L628B
CD6B	26 80 2D	BTJO %80,A,LCD9B
CD6E	8A 62 30	LDA @L6230
CD71	DO 23	MOV A,R35
CD73	8A 62 31	LDA @L6231
CD76	DO 24	MOV A,R36
CD78	8A 62 32	LDA @L6232
CD7B	DO 25	MOV A,R37
CD7D	8A 61 F5	LDA @L61F5
CD80	DO 26	MOV A,R38
CD82	8A 61 F6	LDA @L61F6
CD85	DO 27	MOV A,R39
CD87	8A 61 F7	LDA @L61F7
CD8A	DO 28	MOV A,R40
CD8C	8E CE 2D	CALL @LCCE2D
CD8F	E5 1C	JPZ LCDAD
CD91	8E CE 37	CALL @LCCE37
CD94	E2 17	JZ LCDAD
CD96	22 80	LCD96 MOV %80,A
CD98	8B 62 8B	STA @L628B
CD9B	77 40 1F 05	LCD9B BTJZ %40,R31,LCDAA4
CD9F	D5 20	CLR R32
CDA1	8C CC ED	BR @LCCEED
CDA4	76 40 1F 02	LCDAA4 BTJO %40,R31,LCDAA
CDA8	D5 20	CLR R32
CDAA	8C CC F5	LCDAA BR @LCCEF5
CDAD	8A 62 8F	LCDAD LDA @L628F
CDB0	E6 F2	JNZ LCDA4
CDB2	8A 62 90	LDA @L6290
CDB5	E6 ED	JNZ LCDA4
CDB7	8E CE 1D	CALL @LCCE1D
CDBA	8E CE 2D	CALL @LCCE2D
CDBD	E5 DC	JPZ LCD9B
CDBF	D5 20	CLR R32
CDC1	8A 61 F1	LDA @L61F1
CDC4	27 08 03	BTJZ %08,A,LCDCA
CDC7	74 20 20	OR %20,R32
CDDA	26 02 03	LCDCA BTJO %02,A,LCDDO
CDDC	74 40 20	OR %40,R32
CDDO	8A 62 8E	LCDDO LDA @L628E
CDD3	8D 62 8C	CMPA @L628C
CDD6	E6 08	JNZ LCDEO
CDD8	76 20 1F BF	BTJO %20,R31,LCD9B
CDDC	76 40 1F 30	BTJO %40,R31,LCE10
CDE0	73 DF 1F	LCDEO AND %DF,R31

1	CDE3	8B 62 8C	STA @L628C
2	CDE6	F6	TRAP 9
3	CDE7	8E CE FB	CALL @LCEFB
4	CDEA	F6	TRAP 9
5	CDEB	88 62 BE 46	MOVD %62BE,R70
6	CDEF	8E C3 A7	CALL @LC3A7
7	CDF2	8A 61 F1	LDA @L61F1
8	CDF5	27 10 OC	BTJZ %10,A,LCE04
9	CDF8	52 A6	MOV %A6,B
10	CDFA	88 62 35 35	MOVD %6235,R53 ;Serial number
11	CDFE	72 04 10	MOV %04,R16 ;4 bytes
12	CE01	8E CA 8C	CALL @LCA8C
13	CE04	74 40 1F	LCE04 OR %40,R31
14	CE07	8E CE 37	CALL @LCE37
15	CE0A	E2 8A	JZ LCD96
16	CE0C	88 08 CA 42	MOVD %08CA,R66 ;
17	CE10	F6	LCE10 TRAP 9
18	CE11	DB 42	DEC D R66
19	CE13	E3 8F	JC LCDA4
20	CE15	74 20 1F	LCE15 OR %20,R31
21	CE18	D5 20	CLR R32
22	CE1A	8C CC ED	BR @LC0CED
23	;		
24	CE1D	8A 61 F2	LCE1D LDA @L61F2
25	CE20	DO 26	MOV A,R38
26	CE22	8A 61 F3	LDA @L61F3
27	CE25	DO 27	MOV A,R39
28	CE27	8A 61 F4	LDA @L61F4
29	CE2A	DO 28	MOV A,R40
30	CE2C	0A	RETS
31	;		
32	CE2D	4A 23 26	LCE2D SUB R35,R38
33	CE30	4B 24 27	SBB R36,R39
34	CE33	4B 25 28	SBB R37,R40
35	CE36	0A	RETS
36	;		
37	CE37	52 FF	LCE37 MOV %FF,B
38	CE39	8A 61 F2	LDA @L61F2
39	CE3C	8D 61 F5	CMPA @L61F5
40	CE3F	E6 11	JNZ LCE52
41	CE41	8A 61 F3	LDA @L61F3
42	CE44	8D 61 F6	CMPA @L61F6
43	CE47	E6 09	JNZ LCE52
44	CE49	8A 61 F4	LDA @L61F4
45	CE4C	8D 61 F7	CMPA @L61F7
46	CE4F	E6 01	JNZ LCE52
47	CE51	C5	CLR B
48	CE52	0A	LCE52 RETS
49	CE53	B9	LCE53 POP A
50	CE54	8B 62 15	STA @L6215
51	CE57	B9	POP A
52	CE58	8B 62 16	STA @L6216
53	CE5B	D5 20	CLR R32
54	CE5D	77 40 1F 04	BTJZ %40;R31,LCE65
55	CE61	8E CE FB	CALL @LCEFB
56	CE64	F6	TRAP 9
57	CE65	72 04 24	LCE65 MOV %04,R36
58	CE68	22 36	LCE68 MOV %36,A
59	CE6A	77 01 24 02	BTJZ %01,R36,LCE70

CE6E	22 0F	MOV %OF,A ;
CE70	52 13	LCE70 MOV %13,B ;Put on line 1, col 20
CE72	F3	TRAP 12 ;Write A @B in display memory
CE73	72 07 42	MOV %07,R66
CE76	F6	LCE76 TRAP 9
CE77	DA 42 FC	DJNZ R66,LCE76
CE7A	DA 24 EB	DJNZ R36,LCE68
CE7D	8A 62 16	LDA @L6216
CE80	B8	PUSH A
CE81	8A 62 15	LDA @L6215
CE84	B8	PUSH A
CE85	0A	RETS
CE86	B9	LCE86 POP A
CE87	8B 62 15	STA @L6215
CE8A	B9	POP A
CE8B	8B 62 16	STA @L6216
CE8E	D5 20	CLR R32
CE90	77 40 1F 04	BTJZ %40,R31,LCE98
CE94	8E CE FB	CALL @LCEFB
CE97	F6	TRAP 9
CE98	9A 46	LCE98 LDA *R70
CE9A	C0	MOV A,B
CE9B	B5	CLR A
CE9C	9B 46	STA *R70
CE9E	DB 46	DECD R70
CEAO	9A 46	LDA *R70
CEA2	24 80	OR %80,A
CEA4	9B 46	STA *R70
CEA6	7A 02 46	SUB %02,R70
CEA9	7B 00 45	SBB %00,R69
CEAC	5C 18	MPY %18,B
CEAE	98 01 42	MOVD R1,R66
CEB1	D3 42	INC R66
CEB3	79 00 41	ADC %00,R65
CEB6	8E C3 A7	CALL @LC3A7
CEB9	F6	LCEB9 TRAP 9
CEBA	DB 42	DECD R66
CEBC	E3 FB	JC LCEB9
CEBE	8E CE FB	CALL @LCEFB
CEC1	F6	TRAP 9
CEC2	8A 62 16	LDA @L6216
CEC5	B8	PUSH A
CEC6	8A 62 15	LDA @L6215
CEC9	B8	PUSH A
CECA	0A	RETS
CECB	72 05 25	LCECB MOV %05,R37
CECE	8A 65 90	LDA @L659D
CED1	DA 25 02	LCED1 DJNZ R37,LCED6
CED4	E0 19	JMP LCEEF
CED6	DO 24	LCED6 MOV A,R36
CED8	8E DO D8	CALL @LDOD8
CEDB	23 OF	AND %OF,A
CEDD	E6 09	JNZ LCEES
CEDF	D3 46	INC R70
CEE1	79 00 45	ADC %00,R69
CEE4	9A 46	LDA *R70
CEE6	E6 10	JNZ LCEFB
CEE8	12 24	LCEES MOV R36,A
CEEA	BD 65 9C	CMPA @L659C

CEED	E6 03	JNZ LCEF2
CEEF	22 FF	LCEEF MOV %FF,A
CEF1	0A	RETS
CEF2	C0	LCEF2 MOV A,B
CEF3	AA 65 94	LDA @L6594(B)
CEF6	E0 D9	JMP LCED1
CEFS	12 24	LCEFS MOV R36,A
CEFA	0A	RETS
	:	
CEFB	22 0F	LCEFB MOV %OF,A
CEFD	EE	TRAP 17
	:	
CEFE	73 BF 1F	AND %BF,R31
CF01	0A	RETS
	:	Command >09
	:	
CF02	32 08	LCFO2 MOV R8,B ;Message Pointer
CF04	8A 62 38	LDA @L6238
CF07	AD 60 02	CMPA @L6002(B)
CF0A	E2 03	JZ LCF0F
CF0C	8C F3 8A	LCFOC BR @LF38A
CF0F	8A 62 37	LCFOF LDA @L6237
CF12	AD 60 03	CMPA @L6003(B)
CF15	E6 F5	JNZ LCF0C
CF17	8A 62 36	LDA @L6236
CF1A	AD 60 04	CMPA @L6004(B)
CF1D	E6 ED	JNZ LCF0C
CF1F	AA 60 28	LDA @L6028(B)
CF22	8D 62 47	CMPA @L6247 ;Service ID
CF25	E6 E5	JNZ LCF0C
CF27	AA 60 06	LDA @L6006(B)
CF2A	2D 04	CMP %04,A
CF2C	E3 DE	JC LCF0C
CF2E	2C 81	MPY %81,A
CF30	88 63 90 48	MOVD %6390,R72
CF34	48 01 48	ADD R1,R72
CF37	49 00 47	ADC R0,R71
CF3A	9A 48	LDA *R72
CF3C	32 08	MOV R8,B ;Message Pointer
CF3E	AA 60 07	LDA @L6007(B)
CF41	9D 48	CMPA *R72
CF43	E2 74	JZ LCFB9
CF45	9B 48	STA *R72
CF47	27 40 08	BTJZ %40,A,LCF52
CF4A	22 FF	MOV %FF,A
CF4C	8B 62 68	STA @L6268
CF4F	8B 62 60	STA @L6260
CF52	22 FF	LCF52 MOV %FF,A
CF54	D3 48	INC R72
CF56	79 00 47	ADC %00,R71
CF59	9B 48	STA *R72
CF5B	DB 48	DECD R72
CF5D	32 08	LCF5D MOV R8,B
CF5F	58 07	ADD %07,B
CF61	8E C0 79	CALL @LC079
CF64	8A 62 82	LDA @L6282
CF67	26 0F 49	BTJO %OF,A,LCFB3
CF6A	32 08	MOV R8,B
CF6C	58 05	ADD %05,B

CF6E	AA 60 01	LDA @L6001(B)
CF71	8D 65 9C	CMPA @L659C
CF74	E2 3D	JZ LCFB3
CF76	8D 65 9D	CMPA @L659D
CF79	E6 09	JNZ LCFB4
CF7B	C0	MOV A,B
CF7C	AA 65 94	LDA @L6594(B)
CF7F	8B 65 9D	STA @L659D
CF82	E0 22	JMP LCFA6
CF84	D0 0A	LCFB4 MOV A,R10
CF86	32 0A	MOV R10,B
CF88	AA 65 98	LDA @L6598(B)
CF8B	B8	PUSH A
CF8C	32 0A	MOV R10,B
CF8E	AA 65 94	LDA @L6594(B)
CF91	C9	POP B
CF92	AB 65 94	STA @L6594(B)
CF95	32 0A	MOV R10,B
CF97	AA 65 94	LDA @L6594(B)
CF9A	B8	PUSH A
CF9B	32 0A	MOV R10,B
CF9D	AA 65 98	LDA @L6598(B)
CFA0	C9	POP B
CFA1	AB 65 98	STA @L6598(B)
CFA4	32 0A	MOV R10,B
CFA6	8A 65 9C	LCFA6 LDA @L659C
CFA9	AB 65 98	STA @L6598(B)
CFAC	B6	XCHB A
CFAD	AB 65 94	STA @L6594(B)
CFB0	8B 65 9C	STA @L659C
CFB3	8E C1 06	LCFB3 CALL @LC106
CFB6	8C F3 8A	BR @LF38A
CFB9	D3 48	LCFB9 INC R72
CFBB	79 00 47	ADC %00,R71
CFBE	9A 48	LDA *R72
CFC0	C0	MOV A,B
CFC1	D3 48	INC R72
CFC3	79 00 47	ADC %00,R71
CFC6	9A 48	LDA *R72
CFC8	7A 02 48	SUB %02,R72
CFCB	7B 00 47	SBB %00,R71
CFCE	C1	TSTB
CFCF	E6 8C	JNZ LCF5D
CFD1	26 0F 89	BTJO %0F,A,LCF5D
CFD4	8C F3 8A	BR @LF38A
; MESSAGE		
CFD7	EA	LCFD7 TRAP 21
CFD8	72 80 21	MOV %80,R33
CFDB	22 0F	MOV %0F,A
CFDD	EE	TRAP 17
CFDE	F6	TRAP 9
CFDF	8E D0 FE	CALL @LD0FE
CFE2	E5 17	JPZ LCFFB
CFE4	72 21 42	MOV %21,R66
CFE7	EA	TRAP 21
CFE8	72 02 21	MOV %02,R33
CFEB	D5 20	CLR R32

CFED	88 E1 41 35	MOVD XE141,R53 ;"(NO MESSAGES)"
CFF1	8E C3 18	CALL @LC318
CFF4	F6	LCFF4 TRAP 9
CFF5	DA 42 FC	DJNZ R66,LCFF4
CFF8	8C CC D7	BR @LC0D7
CFFB	EA	LCFFB TRAP 21
CFFC	72 02 21	MOV %02,R33
CFFF	72 43 20	MOV %43,R32
D002	8E D0 F9	CALL @LD0F9
D005	E5 03	JNZ LD00A
D007	8A 65 9C	LDA @L659C
D00A	D0 25	LD00A MOV A,R37
D00C	E0 7A	JMP LD088
D00E	8A 65 9C	LD00E LDA @L659C
D011	1D 25	CMP R37,A
D013	E6 07	JNZ LD01C
D015	88 E1 50 35	MOVD XE150,R53 ;"(NO NEWER MESSAGE)"
D019	8C D0 97	BR @LD097
D01C	32 25	LD01C MOV R37,B
D01E	AA 65 94	LDA @L6594(B)
D021	DO 25	MOV A,R37
D023	8E D0 D8	CALL @LD0D8
D026	23 OF	AND %OF,A
D028	E6 E4	JNZ LD00E
D02A	42 25 23	LD02A MOV R37,R35
D02D	EA	TRAP 21
D02E	72 02 21	MOV %02,R33
D031	22 OF	MOV %OF,A
D033	8E C3 8D	CALL @LC38D
D036	F6	TRAP 9
D037	12 25	MOV R37,A
D039	8E D0 D8	CALL @LD0D8
D03C	24 C0	OR %C0,A
D03E	9B 46	STA *R70
D040	D3 46	INC R70
D042	79 00 45	ADC %00,R69
D045	B5	CLR A
D046	9B 46	STA *R70
D048	7A 03 46	SUB %03,R70
D04B	7B 00 45	SBB %00,R69
D04E	8E C3 A7	CALL @LC3A7
D051	F6	TRAP 9
D052	88 E1 6E 35	LD052 MOVD XE16E,R53 ;"(< OR >)"
D056	8E C3 18	CALL @LC318
D059	F6	TRAP 9
D05A	42 23 25	MOV R35,R37
D05D	EC	LD05D TRAP 19
D05E	88 1A 5E 42	MOVD %1A5E,R66 :
D062	F6	LD062 TRAP 9
D063	DB 42	DECD R66
D065	E3 03	JC LD06A
D067	8C CE 15	BR @LC1E15
D06A	12 19	LD06A MOV R25,A
D06C	E6 F4	JNZ LD062
D06E	22 0A	MOV %0A,A
D070	8D 62 55	CMPA @L6255
D073	E2 99	JZ LD00E
D075	22 0B	MOV %0B,A
D077	8D 62 55	CMPA @L6255

1	D07A	E6 E1	JNZ LD05D
2	D07C	8A 65 9D	LD07C LDA @L659D
3	D07F	1D 25	CMP R37,A
4	D081	E2 10	JZ LD093
5	D083	32 25	MOV R37,B
6	D085	AA 65 98	LDA @L6598(B)
7	D088	DO 25	LD088 MOV A,R37
8	D08A	8E DO D8	CALL @LD0D8
9	D08D	23 0F	AND %OF,A
10	D08F	E2 99	JZ LD02A
11	D091	E0 E9	JMP LD07C
12	D093	88 E1 5F 35	LD093 MOVD %E15F,R53 ;"(NO NEWER MESSAGE)"
13	D097	8E C3 18	LD097 CALL @LC318
14	D09A	72 21 42	MOV %21,R66
15	D09D	EA	TRAP 21
16	D09E	72 02 21	MOV %02,R33
17	DOA1	F6	LD0A1 TRAP 9
18	DOA2	DA 42 FC	DJNZ R66,LD0A1
19	DOA5	8C DO 52	BR @LD052
20		:	
21	DOA8	22 FF	LD0A8 MOV %FF,A
22	DOAA	52 04	MOV %04,B
23	DOAC	88 63 91 48	MOVD %6391,R72
24	DOBO	62	LD0BO MOV B,A
25	DOB1	AB 65 97	STA @L6597(B) ;>01,02,03,04
26	DOB4	2A 02	SUB %02,A
27	DOB6	AB 65 93	STA @L6593(B) ;>FF,00,01,02
28	DOB9	DB 48	DEC D R72
29	DOBB	B5	CLR A
30	DOBC	9B 48	STA *R72
31	DOBE	D3 48	INC R72
32	DOCO	79 00 47	ADC %00,R71
33	DOC3	B4	INV A ;A=>FF
34	DOC4	9B 48	STA *R72
35	DOC6	78 81 48	ADD %81,R72
36	DOC9	79 00 47	ADC %00,R71
37	DOCC	CA E2	DJNZ B,LD0BO
38	DOCE	B5	CLR A
39	DOCF	8B 65 9C	STA @L659C ;@L659C,D=>00,03
40	DOD2	22 03	MOV %03,A
41	DOD4	8B 65 9D	STA @L659D
42	DOD7	0A	RETS
43		:	
44	DOD8	2C 81	LD0D8 MPY %81,A
45	DODA	88 63 91 46	MOVD %6391,R70
46	DODE	48 01 46	ADD R1,R70
47	DOE1	49 00 45	ADC R0,R69
48	DOE4	9A 46	LDA *R70
49	DOE6	D3 46	INC R70
50	DOES	79 00 45	ADC %00,R69
51	DOEB	B0	TSTA
52	DOEC	E2 03	JZ LDOF1
53	DOEE	22 FF	MOV %FF,A
54	DOFO	0A	RETS
55	DOF1	9A 46	LD0F1 LDA *R70
56	DOF3	0A	RETS
57		:	
58	DOF4	72 8F 3A	LD0F4 MOV %8F,R58 ;
59	DOF7	E0 08	JMP LD101

1 DOF9 72 4F 3A LDOF9 MOV %4F,R58 ;
 2 DOFC E0 03 JMP LD101
 3 DOFE 72 0F 3A LDOFE MOV %0F,R58 ;
 4
 5 D101 72 05 3E LD101 MOV %05,R62
 6 D104 8A 65 9D LDA @L659D
 7 D107 DA 3E 02 LD107 DJNZ R62,LD10C
 8 D10A E0 16 JMP LD122
 9 D10C D0 3B LD10C MOV A,R59
 10 D10E 8E D0 D8 CALL @LD0D8
 11 D111 13 3A AND R58,A
 12 D113 E2 10 JZ LD125
 13 D115 12 3B MOV R59,A
 14 D117 8D 65 9C CMFA @L659C
 15 D11A E2 06 JZ LD122
 16 D11C C0 MOV A,B
 17 D11D AA 65 94 LDA @L6594(B)
 18 D120 E0 E5 JMP LD107
 19 D122 72 FF 3B LD122 MOV %FF,R59
 20 D125 12 3B LD125 MOV R59,A
 21 D127 0A RETS
 22
 23 D128 80 80 80 80 LD128 DB >80,80,80,80,80,80,80,80
 24 D130 80 80 80 0D DB >80,80,80,0D,80,80,80,80
 25
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 27 ;
 28 ;
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 54 D138 22 0F LD138 MOV %0F,A
 55 D13A EE TRAP 17
 56 D13B F6 TRAP 9
 57 D13C 77 80 21 02 BTJZ %80,R33,LD142
 58 D140 9C 4C BR *R76
 59 D142 74 40 20 LD142 OR %40,R32
 60 D145 32 21 MOV R33,B
 61 D147 AA D1 8A LDA @LD17A(B)
 62 D14A D0 35 MOV A,R53
 63 D14C AA D1 7A LDA @LD17A(B)
 64 D14F D0 34 MOV A,R52
 65 D151 AA E4 D8 LDA @LE4D8(B) ;Help screens table lengths
 66 D154 D0 10 MOV A,R16
 67 D156 C5 CLR B
 68 D157 8E C3 1D CALL @LC31D
 69 D15A 88 EB 39 35 MOVD %EB39,R53 ;("HELP")"
 70 D15E 32 21 MOV R33,B
 71 D160 AA D1 28 LDA @LD128(B)
 72 D163 D0 21 MOV A,R33
 73 D165 8E C3 18 CALL @LC318
 74 D168 88 1A 5E 46 MOVD %1A5E,R70 ;
 75 D16C F6 LD16C TRAP 9
 76 D16D DB 46 DECD R70
 77 D16F E3 FB JC LD16C
 78 D171 8C CE 15 BR @LC1E15
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D17A E4

LD17A DB LE4E8/256 ; "

; "REFER TO THE USER'S"
; "MANUAL TO INTERPRET"
; "INSTALLATION VALUES."

D17B E5

DB LE533/256 ; "

; "ENTER A DIGIT TO"
; "EXAMINE STORED"
; "INFORMATION, OR TO"
; "CHANGE THE WAY THE"
; "VIDEOCIPHER UNIT"
; "OPERATES."

D17C E5

DB LE59C/256 ; "

; "MESSAGE' DISPLAYS"
; "THE OLDEST UNSEEN"
; "MESSAGE. USE '>'"
; "FOR THE NEXT MESSAGE"
; "OR '<' FOR THE"
; "PREVIOUS ONE."

D17D E6

DB LE605/256 ; "USE 'NEXT PRG' TO"

; "BUY A PROGRAM BEFORE"
; "IT BEGINS. CANCEL"
; "THE PREPURCHASE BY"
; "CHANGING THE CHANNEL"
; "BEFORE THE PROGRAM"

D17E E6

DB LE66B/256 ; "ENTER THE REQUESTED"

; "PASSWORD AND PRESS"
; "THE 'ENTER' KEY."

; "USE THE 'CANCEL' KEY"
; "TO DELETE WRONG"
; "DIGITS."

D17F E6

DB LE604/256 ; "ENTER A 3-DIGIT"

; "NUMBER TO FIND THAT"
; "PAGE. ENTER '>' FOR"
; "THE NEXT PAGE OR '<'"
; "FOR THE LAST PAGE."
; "USE 'CNACEL' TO"
; "STOP A PAGE SEARCH."

D180 E7

DB LE73D/256 ; "

; "FOLLOW THE MENUS AS"
; "PROMPTED IN ORDER TO"
; "CHANGE THE RATING"
; "CEILING, OR TO"
; "PURCHASE AN EVENT."

D181 E7

DB LE797/256 ; "PURCHASE HISTORY"

; "IS THE DATE, TIME,"
; "COST AND NAME OF"
; "THE PREVIOUS 14"
; "PURCHASED PROGRAMS."
; "USE '>' FOR NEWER"
; "ENTRIES, OR '<' FOR"

1 " OLDER ONES. "

2 D182 E8 DB LE80F/256 ; "THE VIDEOCIPHER KEYS"

3 ; "(VIEW, HELP, SETUP,"

4 ; " NEXT PRG, MESSAGE,"

5 ; "TEXT, < AND >) WORK"

6 ; " ONLY WHEN THE "

7 ; "VIDEOCIPHER LIGHT IS"

8 ; " ON, USE THE 'VIEW' "

9 ; " KEY TO SEE TV. "

10 D183 E8 DB LE887/256 ; " USE 'ENTER' TO "

11 ; " MAKE THE PURCHASE."

12 ; "

13 ; " USE 'CANCEL' OR "

14 ; " 'VIEW' TO EXIT "

15 ; " WITHOUT PURCHASE. "

16 D184 E8 DB LE8E1/256 ; "

17 ; " USE '>' TO RAISE "

18 ; " THE RATING CEILING "

19 ; " OR '<' TO LOWER IT."

20 ; " USE 'ENTER' TO "

21 ; " CONTINUE. "

22 D185 E9 DB LE93B/256 ; "

23 ; " AUDIO MODE SELECTS "

24 ; " EITHER THE PRIMARY "

25 ; " OR THE ALTERNATE "

26 ; " PROGRAM WHEN TWO "

27 ; " AUDIO PROGRAMS ARE "

28 ; " BEING BROADCAST. "

29 D186 E9 DB LE9A4/256 ; "CREDIT IS THE DOLLAR"

30 ; "AMOUNT AVAILABLE FOR"

31 ; " MAKING PURCHASES."

32 ; "

33 ; "CREDIT VERIFICATION"

34 ; " IS YOUR PROTECTED "

35 ; " ACCOUNT BALANCE. "

36 D187 EA DB LEA0D/256 ; "

37 ; "A BLINKING * APPEARS"

38 ; " ON THE SCREEN TO "

39 ; " INDICATE AN UNREAD "

40 ; "MESSAGE IF PROMPTING"

41 ; " IS ENABLED. "

42 D188 EA DB LEA67/256 ; " USE 'ENTER' IF NO "

43 ; "PASSWORD IS DESIRED."

44 ; " ENTER FROM 1 TO 8 "

45 ; " DIGITS FOLLOWED BY "

46 ; " 'ENTER' FOR A NEW "

47 ; " PASSWORD. "

48 ; " USE 'CANCEL' TO "

49 ; "DELETE WRONG DIGITS."

50 D189 EA DB LEADF/256 ; "

51 ; " IDENTIFY VIEWING "

52 ; "REPORT LINES BY THE "

; " TWO-DIGIT NUMBER "
; " AT THE BEGINNING "
; " OF EACH LINE. "

D18A E8 LD18A DB LE4E8 MOD 256 ;
D18B 33 DB LE533 MOD 256 ;
D18C 9C DB LE59C MOD 256 ;
D18D 05 DB LE605 MOD 256 ;
D18E 68 DB LE66B MOD 256 ;
D18F D4 DB LE6D4 MOD 256 ;
D190 3D DB LE73D MOD 256 ;
D191 97 DB LE797 MOD 256 ;
D192 0F DB LE80F MOD 256 ;
D193 87 DB LE887 MOD 256 ;
D194 E1 DB LE8E1 MOD 256 ;
D195 3B DB LE93B MOD 256 ;
D196 A4 DB LE9A4 MOD 256 ;
D197 0D DB LEA0D MOD 256 ;
D198 67 DB LEA67 MOD 256 ;
D199 DF DB LEADF MOD 256 ;

D19A F6 LD19A TRAP 9
D19B EA TRAP 21
D19C 72 08 21 MOV %08, R33
D19F D5 19 CLR R25
D1A1 D5 28 CLR R40
D1A3 8A 62 2D LDA @L622D
D1A6 D0 25 MOV A, R37
D1A8 8E D6 BA CALL @LD6BA
D1AB 12 26 MOV R38, A
D1AD 26 08 05 BTJ0 %08, A, LD1B5
D1B0 8E D6 A7 CALL @LD6A7
D1B3 E1 06 JN LD1BB
D1B5 72 06 21 LD1B5 MOV %06, R33
D1B8 8C D2 66 BR @LD266
D1BB 72 2E 42 LD1BB MOV %2E, R66
D1BE F6 TRAP 9
D1BF 22 0F MOV %0F, A
D1C1 EE TRAP 17
D1C2 F6 TRAP 9
D1C3 EA TRAP 21
D1C4 72 08 21 MOV %08, R33
D1C7 D5 27 CLR R39
D1C9 77 80 26 03 BTJZ %80, R38, LD1D0
D1CD 8C CC ED BR @LC00ED
D1D0 77 10 26 0B LD1D0 BTJZ %10, R38, LD1DF
D1D4 86 DE CB 35 MOVD %DEC8, R53 ;" INFORMATION IS "
;" NOT AVAILABLE "

D1D8 52 78 MOV %78, B ;Put on Lines 7 and 8
D1DA 8E C3 0D CALL @LC30D
D1DD EO 6A JMP LD249
D1DF 88 00 E1 42 LD1DF MOVD %00E1, R66
D1E3 EA TRAP 21
D1E4 72 08 21 MOV %08, R33
D1E7 77 20 26 08 BTJZ %20, R38, LD1F3
D1EB 88 DE 17 35 MOVD %DE17, R53 ;" NO SUBSCRIPTION "

D1EF	52 78	MOV Z78,B :Put on Line 7
D1F1	E0 13	JMP LD206
D1F3	77 40 26 30	LD1F3 BTJZ Z40,R38,LD227
D1F7	8E D6 B1	CALL @LD6B1
D1FA	88 E2 40 35	MOVD ZE240,R53 ;" BLACKOUT IN EFFECT "
D1FE	52 50	MOV Z50,B :Put on Line 5
D200	12 27	MOV R39,A
D202	E1 02	JN LD206
D204	52 78	MOV Z78,B :Put on Line 7
D206	8E C3 1A	LD206 CALL @LC31A
D209	32 24	MOV R36,B
D20B	58 02	ADD Z02,B
D20D	F5	TRAP 10
D20E	AA 61 00	LDA @L6100(B)
D211	27 01 0A	BTJZ Z01,A,LD21E
D214	88 E2 7C 35	MOVD ZE27C,R53 ;" FOR THIS PROGRAM "
D218	72 05 10	MOV Z05,R16
D21B	8E C3 37	CALL @LC337
D21E	12 27	LD21E MOV R39,A
D220	E5 27	JPZ LD249
D222	8E D8 F9	CALL @LD8F9
D225	E0 22	JMP LD249
D227	72 43 42	LD227 MOV Z43,R66
D22A	EA	TRAP 21
D22B	72 08 21	MOV Z08,R33
D22E	D5 20	CLR R32
D230	32 24	MOV R36,B
D232	F5	TRAP 10
D233	AA 61 13	LDA @L6113(B)
D236	27 10 09	BTJZ Z10,A,LD242
D239	52 64	MOV Z64,B :Put on Line 6
D23B	88 E2 8B 35	MOVD ZE28B,R53 ;" * PREVIEW OF: * "
D23F	8E C3 1A	CALL @LC31A
D242	12 24	LD242 MOV R36,A
D244	52 78	MOV Z78,B :Put on Line 7
D246	8E D6 09	CALL @LD609
D249	F6	LD249 TRAP 9
D24A	8E D5 CC	CALL @LD5CC
D24D	32 24	MOV R36,B
D24F	58 02	ADD Z02,B
D251	F5	TRAP 10
D252	AA 61 00	LDA @L6100(B)
D255	27 01 08	BTJZ Z01,A,LD260
D258	8E FC 22	CALL @LFC22
D25B	52 A0	MOV ZAO,B
D25D	8E FC EE	CALL @LFCEE
D260	DA 42 E6	LD260 DJNZ R66,LD249
D263	9C CC ED	BR @LC2ED
D266	72 40 20	LD266 MOV Z40,R32
D269	22 2E	MOV Z2E,A ;" "
D26B	8E C3 8D	CALL @LC38D
D26E	88 E2 F4 35	MOVD ZE2F4,R53 ;" ('ENTER') "
D272	8E C3 18	CALL @LC318
D275	F6	TRAP 9
D276	77 80 26 5F	BTJZ Z80,R38,LD2D9
D27A	52 64	MOV Z64,B :Put on Line 6
D27C	88 E2 B8 35	MOVD ZE2B8,R53 ;" *PROGRAM LOCKED OUT* "
D280	8E C3 1A	CALL @LC31A
D283	88 1A 5E 42	MOVD Z1A5E,R66 ;

D287	EC	LD287 TRAP 19
D288	F6	LD288 TRAP 9
D289	52 3C	MOV X3C,B ;Put on line 4
D28B	72 03 10	MOV X03,R16 ;12 characters
D28E	88 DE 44 35	MOVD XDE44,R53 ;" RATING: "
D292	8E C3 1D	CALL @LC31D
D295	8A 62 2F	LDA @L622F
D298	52 4B	MOV X4B,B ;Put on line 4, col 16
D29A	8E D6 17	CALL @LD617 ;Put rating in display memory
D29D	8A 62 2F	LDA @L622F
D2A0	8E D6 A7	CALL @LD6A7
D2A3	E1 2E	JN LD2D3
D2A5	8A 62 2E	LDA @L622E
D2A8	23 18	AND X18,A
D2AA	E2 2A	JZ LD2D6
D2AC	DB 42	DECD R66
D2AE	E3 03	JC LD2B3
D2B0	8C CE 15	BR @LCE15
D2B3	12 19	LD2B3 MOV R25,A
D2B5	E6 D1	JNZ LD288
D2B7	12 1A	MOV R26,A
D2B9	E6 CC	JNZ LD2B7
D2BB	8A 62 2F	LD2BB LDA @L622F
D2BE	8E D6 A7	CALL @LD6A7
D2C1	E1 10	JN LD2D3
D2C3	8A 62 2E	LDA @L622E
D2C6	23 18	AND X18,A
D2C8	E2 0C	JZ LD2D6
D2CA	8A 62 2F	LDA @L622F
D2CD	CO	MOV A,B
D2CE	8E C3 FD	CALL @LC3FD
D2D1	E0 E8	JMP LD2BB
D2D3	8C CC ED	LD2D3 BR @LCCED
D2D6	8C CC D7	LD2D6 BR @LCCD7
D2D9	88 1A 5E 42	LD2D9 MOVD X1A5E,R66 ;
D2DD	EC	TRAP 19
D2DE	F6	LD2DE TRAP 9
D2DF	8E D7 E1	CALL @LD7E1
D2E2	8E D5 CC	CALL @LD5CC
D2E5	F6	TRAP 9
D2E6	32 24	MOV R36,B
D2E8	58 02	ADD X02,B
D2EA	F5	TRAP 10
D2EB	AA 61 00	LDA @L6100(B)
D2EE	27 01 08	BTJZ X01,A,LD2F9
D2F1	8E FC 22	CALL @LFC22
D2F4	52 78	MOV X78,B
D2F6	8E FC EE	CALL @LFCEE
D2F9	F6	LD2F9 TRAP 9
D2FA	DB 42	DECD R66
D2FC	E3 03	JC LD301
D2FE	8C CE 15	BR @LCE15
D301	12 19	LD301 MOV R25,A
D303	E6 D9	JNZ LD2DE
D305	12 28	MOV R40,A
D307	E2 11	JZ LD31A
D309	12 1A	MOV R26,A
D30B	E6 03	JNZ LD310
D30D	8C D3 BB	BR @LD3BB

1	D310	22 OC	LD310 MOV ZOC,A
2	D312	8D 62 55	CMPA @L6255
3	D315	E6 C2	JNZ LD2D9
4	D317	8C D1 9A	BR @LD19A
5	D31A	12 1A	LD31A MOV R26,A
6	D31C	E6 BB	JNZ LD2D9
7	D31E	72 01 28	MOV %01,R40
8	D321	77 08 26 1B	BTJZ %08,R38,LD340
9	D325	8E D5 AE	CALL @LD5AE
10	D328	E3 16	JC LD340
11	D32A	F6	TRAP 9
12	D32B	72 2D 42	MOV %2D,R66
13	D32E	EA	TRAP 21
14	D32F	72 06 21	MOV %06,R33
15	D332	88 DE BC 35	MOVD %DEBC,R53 ;" (NOT ENOUGH CREDIT)"
16	D336	8E C3 18	CALL @LC318
17	D339	F6	LD339 TRAP 9
18	D33A	DA 42 FC	DJNZ R66,LD339
19	D33D	8C D1 9A	BR @LD19A
20	D340	12 26	LD340 MOV R38,A
21	D342	8E D6 A7	CALL @LD6A7
22	D345	E1 13	JN LD35A
23	D347	CO	MOV A,B
24	D348	8E C4 02	CALL @LC402
25	D34B	12 26	MOV R38,A
26	D34D	8E D6 A7	CALL @LD6A7
27	D350	E1 03	JN LD355
28	D352	8C CC D7	BR @LC0D7
29	D355	8E D6 BA	LD355 CALL @LD6BA
30	D358	E0 E6	JMP LD340
31	D35A	76 08 26 03	LD35A BTJO %08,R38,LD361
32	D35E	8C CC ED	BR @LC0CED
33	D361	8A 62 60	LD361 LDA @L6260
34	D364	E1 41	JN LD3A7
35	D366	EA	LD366 TRAP 21
36	D367	72 04 21	MOV %04,R33
37	D36A	22 2E	MOV %2E,A ;" "
38	D36C	8E C3 8D	CALL @LC38D
39	D36F	F6	TRAP 9
40	D370	52 8C	MOV %8C,B ;Put on Line 8
41	D372	88 E1 AA 35	MOVD %E1AA,R53 ;" (ENTER THE PURCHASE)"
42	D376	8E C3 1A	CALL @LC31A
43	D379	88 E1 9B 35	MOVD %E19B,R53 ;" (PASSWORD:)"
44	D37D	8E C3 18	CALL @LC318
45	D380	F6	TRAP 9
46	D381	8E D8 A0	CALL @LD8A0
47	D384	8E D6 9A	CALL @LD69A
48	D387	E2 1E	JZ LD3A7
49	D389	72 21 42	MOV %21,R66
50	D390	EA	TRAP 21
51	D39D	72 04 21	MOV %04,R33
52	D390	52 8C	MOV %8C,B ;Put on Line 8
53	D392	88 E8 A5 35	MOVD %E8A5,R53 ;" "
54	D396	8E C3 1A	CALL @LC31A
55	D399	88 E1 B9 35	MOVD %E1B9,R53 ;" (WRONG PASSWORD)"
56	D39D	8E C3 18	CALL @LC318
57	D3A0	F6	LD3A0 TRAP 9
58	D3A1	DA 42 FC	DJNZ R66,LD3A0
59	D3A4	8C D3 66	BR @LD366

D3A7	EA	LD3A7 TRAP 21
D3A8	72 09 21	MOV Z09,R33 ;9 lines
D3AB	88 E4 44 46	MOVD ZE444,R70 ;
		; "(PRESS 'ENTER' TO)"
		; "(CONFIRM PURCHASE)"
D3AF	ED	TRAP 18
D3B0	F6	TRAP 9
D3B1	12 24	MOV R36,A
D3B3	52 00	MOV Z00,B
D3B5	8E D6 09	CALL @LD609
D3B8	8C D2 D9	BR @LD2D9
D3BB	8E D8 69	LD3BB CALL @LD869
D3BE	8C CC ED	BR @LC00D
		;
		; NEXT PRG
		;
D3C1	F6	LD3C1 TRAP 9
D3C2	22 0F	MOV Z0F,A
D3C4	EE	TRAP 17
D3C5	F6	TRAP 9
D3C6	EA	TRAP 21
D3C7	72 08 21	MOV Z08,R33
D3CA	12 1D	MOV R29,A
D3CC	23 7F	AND Z7F,A
D3CE	E2 F1	JZ LD3C1
D3D0	12 1D	MOV R29,A
D3D2	E5 03	JPZ LD3D7
D3D4	8C CC D7	BR @LC00D7
D3D7	D5 28	LD3D7 CLR R40
D3D9	73 40 20	AND Z40,R32
D3DC	8E D7 D0	CALL @LD7D0
D3DF	8E D6 BA	CALL @LD6BA
D3E2	12 26	MOV R38,A
D3E4	26 08 05	BTJD Z08,A,LD3EC
D3E7	8E D6 A7	CALL @LD6A7
D3EA	E1 06	JN LD3F2
D3EC	72 03 21	LD3EC MOV Z03,R33
D3EF	8C D4 95	BR @LD495
D3F2	72 44 42	LD3F2 MOV Z44,R66
D3F5	F6	TRAP 9
D3F6	EA	TRAP 21
D3F7	72 08 21	MOV Z08,R33
D3FA	D5 20	CLR R32
D3FC	D5 27	CLR R39
D3FE	77 10 26 0B	BTJZ Z10,R38,LD40D
D402	88 DE CB 35	MOVD ZDECB,R53 ;" INFORMATION IS "
		; " NOT AVAILABLE "
D406	52 64	MOV Z64,B ;Put on lines 6 and 7
D408	8E C3 OD	CALL @LC30D
D40B	E0 22	JMP LD42F
D40D	77 20 26 08	LD40D BTJZ Z20,R38,LD419
D411	88 DE 17 35	MOVD ZDE17,R53 ;" NO SUBSCRIPTION "
D415	52 78	MOV Z78,B ;Put on line 7
D417	E0 13	JMP LD42C
D419	8E D6 B1	LD419 CALL @LD6B1
D41C	77 40 26 2D	BTJZ Z40,R38,LD44D
D420	88 E2 40 35	MOVD ZE240,R53 ;" BLACKOUT IN EFFECT "
D424	52 50	MOV Z50,B ;Put on line 5
D426	12 27	MOV R39,A

1	D428	E1 02	JN LD42C
2	D42A	52 78	MOV %78,B ;Put on Line 7
3	D42C	8E C3 1A	LD42C CALL @LC31A
4	D42F	32 24	LD42F MOV R36,B
5	D431	58 02	ADD %02,B
6	D433	F5	TRAP 10
7	D434	AA 61 00	LDA @L6100(B)
8	D437	27 01 0A	BTJZ %01,A,LD444
9	D43A	88 E2 6D 35	MOVD %E26D,R53 ;"FOR THE NEXT PROGRAM"
10	D43E	72 05 10	MOV %05,R16 ;20 characters
11	D441	8E C3 37	CALL @LC337
12	D444	12 27	LD444 MOV R39,A
13	D446	E5 1E	JPZ LD466
14	D448	8E D8 F9	CALL @LD8F9
15	D44B	E0 19	JMP LD466
16	D44D	32 24	LD44D MOV R36,B
17	D44F	F5	TRAP 10
18	D450	AA 61 13	LDA @L6113(B)
19	D453	27 10 09	BTJZ %10,A,LD45F
20	D456	52 64	MOV %64,B ;Put on Line 6
21	D458	88 E2 BB 35	MOVD %E2BB,R53 ;" FOR THIS PROGRAM "
22	D45C	8E C3 1A	CALL @LC31A
23	D45F	52 78	LD45F MOV %78,B ;Put on Line 7
24	D461	12 24	MOV R36,A
25	D463	8E D6 09	CALL @LD609
26	D466	F6	LD466 TRAP 9
27	D467	8E D5 ED	CALL @LD5ED
28	D46A	52 02	MOV %02,B
29	D46C	8A 62 2D	LDA @L622D
30	D46F	BE	RL A
31	D470	BE	RL A
32	D471	BE	RL A
33	D472	CF	RLC B
34	D473	58 02	ADD %02,B
35	D475	F5	TRAP 10
36	D476	AA 61 00	LDA @L6100(B)
37	D479	27 01 08	BTJZ %01,A,LD484
38	D47C	8E FC 22	CALL @LFCE22
39	D47F	52 A0	MOV %A0,B
40	D481	8E FC EE	CALL @LFCEE
41	D484	DA 42 DF	LD484 DJNZ R66,LD466
42	D487	7D 04 1D	LD487 CMP %04,R29
43	D48A	E2 03	JZ LD48F
44	D48C	8C CC D7	BR @LC0D7
45	D48F	74 04 1F	LD48F OR %04,R31
46	D492	8C CC ED	BR @LC0CED
47	D495	72 40 20	LD495 MOV %40,R32
48	D498	22 2E	MOV %2E,A
49	D49A	8E C3 8D	CALL @LC38D
50	D49D	88 E2 F4 35	MOVD %E2F4,R53 ;" ('ENTER') "
51	D4A1	8E C3 18	CALL @LC318
52	D4A4	F6	TRAP 9
53	D4A5	88 1A 5E 42	LD4A5 MOVD %1A5E,R66 ;
54	D4A9	EC	TRAP 19
55	D4AA	F6	LD4AA TRAP 9
56	D4AB	8E D7 E1	CALL @LD7E1
57	D4AE	8E D5 ED	CALL @LD5ED
58	D4B1	F6	TRAP 9
59	D4B2	52 02	MOV %02,B

1	D4B4	SA 62 2D	LDA @L622D
2	D4B7	BE	RL A
3	D4B8	BE	RL A
4	D4B9	BE	RL A
5	D4BA	CF	RLC B
6	D4BB	58 02	ADD X02,B
7	D4BD	F5	TRAP 10
8	D4BE	AA 61 00	LDA @L6100(B)
9	D4C1	27 01 08	BTJZ X01,A,LD4CC
10	D4C4	8E FC 22	CALL @LFC22
11	D4C7	52 78	MOV X78,B ;Put on line 7
12	D4C9	8E FC EE	CALL @LFCEE
13	D4CC	F6	LD4CC TRAP 9
14	D4CD	DB 42	DEC D R66
15	D4CF	E3 03	JC LD4D4
16	D4D1	8C CE 15	BR @LCE15
17	D4D4	12 19	LD4D4 MOV R25,A
18	D4D6	E6 D2	JNZ LD4AA
19	D4D8	12 28	MOV R40,A
20	D4DA	E2 15	JZ LD4F1
21	D4DC	12 1A	MOV R26,A
22	D4DE	E6 08	JNZ LD4E8
23	D4EO	8E D8 69	CALL @LD869
24	D4E3	D5 26	CLR R38
25	D4E5	8C D3 C1	LD4E5 BR @LD3C1
26	D4E8	22 0C	LD4E8 MOV X0C,A
27	D4EA	8D 62 55	CMPA @L6255
28	D4ED	E6 B6	JNZ LD4A5
29	D4EF	E0 F4	JMP LD4E5
30	D4F1	12 1A	LD4F1 MOV R26,A
31	D4F3	E6 B0	JNZ LD4A5
32	D4F5	72 01 28	MOV X01,R40
33	D4F8	77 08 26 30	BTJZ X08,R38,LD52C
34	D4FC	8E D6 31	CALL @LD631
35	D4FF	32 24	MOV R36,B
36	D501	F5	TRAP 10
37	D502	AA 61 11	LDA @L6111(B)
38	D505	DO 3D	MOV A,R61
39	D507	AA 61 12	LDA @L6112(B)
40	D50A	07	SETC
41	D50B	4F 3D 3B	DSB R61,R59
42	D50E	4B 00 3A	SBB R0,R58
43	D511	7B 00 3E	SBB X00,R62
44	D514	E3 16	JC LD52C
45	D516	F6	TRAP 9
46	D517	72 2D 42	MOV X2D,R66
47	D51A	EA	TRAP 21
48	D51B	72 03 21	MOV X03,R33
49	D51E	88 DE BC 35	MOVD XDEBC,R53 ;"(NOT ENOUGH CREDIT)"
50	D522	8E C3 18	CALL @LC318
51	D525	F6	LD525 TRAP 9
52	D526	DA 42 FC	DJNZ R66,LD525
53	D529	8C D4 87	BR @LD487
54	D52C	12 26	LD52C MOV R38,A
55	D52E	8E D6 A7	CALL @LD6A7
56	D531	E1 13	JN LD546
57	D533	C0	MOV A,B
58	D534	8E C4 07	CALL @LC407
59	D537	12 26	MOV R38,A

D539 8E D6 A7 CALL @LD6A7
D53C E1 03 JN LD541
D53E 8C CC D7 BR @LCCD7
D541 8E D6 BA LD541 CALL @LD6BA
D544 E0 E6 JMP LD52C
D546 76 08 26 03 LD546 BTJO %08,R38,LD54D
D54A 8C D3 C1 BR @LD3C1
D54D 8A 62 60 LD54D LDA @L6260
D550 E1 48 JN LD59A
D552 EA LD552 TRAP 21
D553 72 04 21 MOV %04,R33
D554 22 2E MOV %2E,A ;"
D558 8E C3 8D CALL @LC38D
D55B 88 E2 F4 35 MOVD %E2F4,R53 ;("ENTER")"
D55F 8E C3 18 CALL @LC318
D562 F6 TRAP 9
D563 88 E1 AA 35 MOVD %E1AA,R53 ;(ENTER THE PURCHASE)"
D567 52 8C MOV %8C,B ;Put on Line 8
D569 8E C3 1A CALL @LC31A
D56C 88 E1 9B 35 MOVD %E19B,R53 ;(PASSWORD:)"
D570 8E C3 18 CALL @LC318
D573 F6 TRAP 9
D574 8E D8 9B CALL @LD89B
D577 8E D6 9A CALL @LD69A
D57A E2 1E JZ LD59A
D57C 72 21 42 MOV %21,R66
D57F EA TRAP 21
D580 72 04 21 MOV %04,R33
D583 52 8C MOV %8C,B ;Put on Line 8
D585 88 E8 A5 35 MOVD %E8A5,R53 ;"
D589 8E C3 1A CALL @LC31A
D58C 88 E1 B9 35 MOVD %E1B9,R53 ;(WRONG PASSWORD)"
D590 8E C3 18 CALL @LC318
D593 F6 LD593 TRAP 9
D594 DA 42 FC DJNZ R66,LD593
D597 8C D5 52 BR @LD552
D59A EA LD59A TRAP 21
D59B 72 09 21 MOV %09,R33
D59E 88 E4 44 46 MOVD %E444,R70 :
;"(PRESS 'ENTER' TO)"
;"(CONFIRM PURCHASE)"
D5A2 ED TRAP 18
D5A3 F6 TRAP 9
D5A4 12 24 MOV R36,A
D5A6 52 00 MOV %00,B
D5A8 8E D6 09 CALL @LD609
D5AB 8C D4 A5 BR @LD4A5
D5AE 8E D6 31 LD5AE CALL @LD631
D5B1 32 24 MOV R36,B
D5B3 F5 TRAP 10
D5B4 AA 61 11 LDA @L6111(B)
D5B7 DD 3D MOV A,R61
D5B9 AA 61 12 LDA @L6112(B)
D5BC 07 SETC
D5BD 4F 3D 3B DSB R61,R59
D5C0 4B 00 3A SBB R0,R58
D5C3 7B 00 3E SBB %00,R62
D5C6 0A RETS

38
39
40 D5ED D5 3D LD5ED CLR R61
41 D5EF 8A 62 2E LD5EF LDA @622E ;Signal type code 1
42 D5F2 26 18 08 BTJO X18,A,LD5FD
43 D5F5 8A 62 2D LDA @622D ;
44 D5F8 15 25 XOR R37,A
45 D5FA 26 60 0B BTJO X60,A,LD608
46 D5FD 77 FF 3D 02 LD5FD BTJZ XFF,R61,LD603
47 D601 B9 POP A
48 D602 B9 POP A
49 D603 B9 LD603 POP A
50 D604 B9 POP A
51 D605 8C CC ED BR @CCED
52 D608 0A LD608 RETS
53 ;
54 D609 C9 LD609 PUSH B
55 D60A C0 MOV A,B
56 D60B 58 02 ADD X02,B
57 D60D F5 TRAP 10
58 D60E A8 61 05 35 MOVD X6105(B),R53
59 D612 C9 POP B
60 D613 8E C3 0D CALL @C30D

61 ;
62 D5C7 72 FF 3D LD5C7 MOV XFF,R61
63 D5CA E0 02 JMP LD5CE
64 D5CC D5 3D LD5CC CLR R61
65 D5CE 8A 62 2E LD5CE LDA @L622E ;Signal type code 1
66 D5D1 26 18 09 BTJO X18,A,LD5DD
67 D5D4 8A 62 2D LDA @L622D ;
68 D5D7 15 25 XOR R37,A
69 D5D9 26 60 01 BTJO X60,A,LD5DD
70 D5DC 0A RETS
71 D5DD 77 01 3D 02 LD5DD BTJZ X01,R61,LD5E3
72 D5E1 B9 POP A
73 D5E2 B9 POP A
74 D5E3 B9 LD5E3 POP A
75 D5E4 B9 POP A
76 D5E5 8C CC ED BR @CCED
77 ;
78 D5E8 72 FF 3D LD5E8 MOV XFF,R61
79 D5E8 E0 02 JMP LD5EF

D616 0A RETS
; Put Program Rating in display memory
D617 23 07 LD617 AND X07,A
D619 D0 10 MOV A,R16
D61B 18 00 ADD R0,A
D61D 48 00 10 ADD R0,R16
D620 D6 10 XCHB R16
D622 A8 61 CB 35 MOVD X61CB(B),R53
D626 52 01 MOV X01,B ;4 Characters
D628 D6 10 XCHB R16
D62A 8C C3 1D BR @C31D

D62D 32 0E LD62D MOV R14,B
D62F E0 02 JMP LD633
D631 32 23 LD631 MOV R35,B
D633 D5 3B LD633 CLR R59
D635 F5 TRAP 10
D636 AA 61 0F LDA @610F(B)
D639 D0 3A MOV A,R58
D63B AA 61 10 LDA @6110(B)
D63E D0 3E MOV A,R62
D640 8A 62 3A LDA @623A
D643 C0 MOV A,B
D644 8A 62 3B LDA @623B
D647 07 SETC
D648 4F 01 3B DSB R1,R59
D64B 4B 00 3A SBB R0,R58
D64E 0E PUSHST
D64F 8A 62 3C LDA @623C
D652 08 POPST
D653 4B 00 3E SBB R0,R62
D656 E3 06 JC LD65E
D658 D5 3B CLR R59
D65A D5 3A CLR R58
D65C D5 3E CLR R62
D65E 7D 27 3E LD65E CMP X27,R62
D661 E7 10 JNC LD673
D663 E6 05 JNZ LD66A
D665 7D 10 3A CMP X10,R58

14112 G.B.	D668	E7 09	JNC LD673
	D66A	72 27 3E	LD66A MOV X27,R62
	D66D	72 0F 3A	MOV X0F,R58
1	D670	72 99 3B	MOV X99,R59
2	D673	0A	LD673 RETS
3	D674	B5	LD674 CLR A
4	D675	C5	CLR B
5	D676	72 10 10	MOV X10,R16
6	D679	DF 3A	LD679 RLC R58
7	D67B	DF 3E	RLC R62
8	D67D	1E 00	DAC R0,A
9	D67F	3E 01	DAC R1,B
10	D681	DA 10 F5	DJNZ R16,LD679
11	D684	00 3A	MOV A,R58
12	D686	D1 3E	MOV B,R62
13	D688	0A	RETS
14	D689	12 3E	LD689 MOV R62,A
15	D68B	8E F0 B8	CALL @F0B8
16	D68F	12 3A	MOV R58,A
17	D690	8E F0 BA	CALL @F0BA
18	D693	22 2D	MOV X2D,A ;?.
19	D695	F2	TRAP 13 :Write A to display memory
20	D696	12 3B	MOV R59,A
21	D698	F0	TRAP 15
22	D699	0A	RETS
23	D69A	52 08	LD69A MOV X08,B
24	D69C	AA 62 54	LD69C LDA @6254(B)
25	D69F	AD 62 5F	CMPA @625F(B)
26	D6A2	E6 02	JNZ LD6A6
27	D6A4	CA F6	DJNZ B,LD69C
28	D6A6	0A	LD6A6 RETS
29	D6A7	23 07	LD6A7 AND X07,A
30	D6A9	B2	DEC A
31	D6AA	8D 62 53	CMPA @6253
32	D6AD	0E	PUSHST
33	D6AE	B3	INC A
34	D6AF	08	POPST
35	D6B0	0A	RETS
36	D6B1	32 24	LD6B1 MOV R36,B
37	D6B3	F5	TRAP 10
38	D6B4	AA 61 15	LDA @6115(B)
39	D6B7	00 27	MOV A,R39
40	D6B9	0A	RETS
41	D6BA	D5 26	LD6BA CLR R38
42	D6BC	12 25	MOV R37,A
43	D6BE	72 01 23	MOV X01,R35
44	D6C1	BE	RL A
45	D6C2	DF 23	RLC R35
46	D6C4	72 02 24	MOV X02,R36
47	D6C7	BE	RL A
48	D6C8	BE	RL A
49	D6C9	DF 24	RLC R36
50	D6CB	8A 62 2E	LDA @622E
51	D6CE	23 18	AND X18,A
52	D6D0	E2 0C	JZ LD6DE
53	D6D2	72 80 26	MOV X80,R38
54	D6D5	8A 62 2F	LDA @622F
55	D6D8	23 07	AND X07,A
56	D6DA	44 00 26	OR R0,R38
57	D6DD	0A	RETS

D6DE 32 23 LD6DE MOV R35,B
D6E0 F5 TRAP 10
D6E1 AA 61 12 LDA @6112(B)
D6E4 D0 3B MOV A,R59
D6E6 AA 61 13 LDA @6113(B)
D6E9 D0 3A MOV A,R58
D6EB 32 23 MOV R35,B
D6ED 5A 02 SUB %02,B
D6EF F5 TRAP 10
D6F0 12 3B MOV R59,A
D6F2 AD 61 00 CMPA @6100(B)
D6F5 E6 25 JNZ LD71C
D6F7 12 3A MOV R58,A
D6F9 AD 61 01 CMPA @6101(B)
D6FC E6 1E JNZ LD71C
D6FE 32 24 MOV R36,B
D700 58 02 ADD %02,B
D702 F5 TRAP 10
D703 AA 61 00 LDA @6100(B)
D706 15 25 XOR R37,A
D708 26 60 11 BTJO %60,A,LD71C
D70B 32 24 MOV R36,B
D70D F5 TRAP 10
D70E 12 3B MOV R59,A
D710 AD 61 00 CMPA @6100(B)
D713 E6 07 JNZ LD71C
D715 12 3A MOV R58,A
D717 AD 61 01 CMPA @6101(B)
D71A E2 04 JZ LD720
D71C 72 10 26 LD71C MOV %10,R38
D71F 0A RETS
D720 AA 61 14 LD720 LDA @6114(B)
D723 15 25 XOR R37,A
D725 26 60 F4 BTJO %60,A,LD71C
D728 8A 62 4B LDA @624B
D72B 4D 00 16 CMP R0,R22
D72E E6 20 JNZ LD750
D730 AA 61 09 LDA @6109(B)
D733 8D 62 4C CMPA @624C
D736 E6 18 JNZ LD750
D738 AA 61 0A LDA @610A(B)
D73B 8D 62 4D CMPA @624D
D73E E6 10 JNZ LD750
D740 AA 61 0B LDA @610B(B)
D743 8D 62 4E CMPA @624E
D746 E6 08 JNZ LD750
D748 AA 61 0C LDA @610C(B)
D74B 8D 62 4F CMPA @624F
D74E E2 74 JZ LD7C4
D750 8A 62 51 LD750 LDA @6251
D753 15 25 XOR R37,A
D755 26 60 05 BTJO %60,A,LD750
D758 8A 62 52 LDA @6252
D75B E6 67 JNZ LD7C4
D75D AA 61 13 LD75D LDA @6113(B)
D760 27 20 24 BTJZ %20,A,LD787
D763 AA 61 19 LDA @6119(B)
D766 AD 61 42 CMPA @6142(B)
D769 E6 B1 JNZ LD71C
D76B AA 61 14 LDA @6114(B)

D7F2 88 DE 53 35 LD7F2 MOVD XDE53,R53 ;" CREDIT: " "
D7F6 72 03 10 MOV X03,R16 ;12 characters
D7F9 52 64 MOV X64,B ;Put on Line 6
D7FB 8E C3 1D CALL @C31D
D7FE 8E D6 31 CALL @D631
D801 8E D6 74 CALL @D674
D804 52 70 MOV X70,B ;Put on Line 7
D806 8E D6 89 CALL @D689
D809 52 50 MOV X50,B ;Put on Line 5
D80B 88 DE 35 35 MOVD XDE35,R53 ;" COST: "
D80F 72 03 10 MOV X03,R16 ;12 characters
D812 8E C3 1D CALL @C31D
D815 32 24 MOV R36,B
D817 F5 TRAP 10
D818 AA 61 11 LDA @6111(B)
D819 DO 3B MOV A,R59
D81D AA 61 12 LDA @6112(B)
D820 DO 3A MOV A,R58
D822 D5 3E CLR R62
D824 8E D6 74 CALL @D674
D827 52 5C MOV X5C,B ;Put on Line 5, col 13
D829 8E D6 89 CALL @D689
D82C D5 3D CLR R61
D82E 32 24 LD82E MOV R36,B
D830 F5 TRAP 10
D831 AA 61 13 LDA @6113(B)
D834 73 F8 26 AND XF8,R38
D837 23 07 AND X07,A
D839 44 00 26 OR R0,R38
D83C B0 TSTA
D83D E2 1E JZ LD85D
D83F 52 4B MOV X4B,B ;Put on Line 4, col 16
D841 8E D6 17 CALL @D617
D844 52 3C MOV X3C,B ;Put on Line 4
D846 88 DE 44 35 MOVD XDE44,R53 ;" RATING: "
D84A 72 03 10 MOV X03,R16 ;12 characters
D84D 8E C3 1D CALL @C31D
D850 12 26 MOV R38,A
D852 8E D6 A7 CALL @D6A7
D855 E1 06 JN LD85D
D857 88 E2 B8 35 MOVD XE2B8,R53 ;"PROGRAM LOCKED OUT"
D85B E0 04 JMP LD861
D85D 88 E8 A5 35 LD85D MOVD XE8A5,R53 ;" "
D861 52 28 LD861 MOV X28,B ;Put on Line 3
D863 38 3D ADD R61,B
D865 8E C3 1A CALL @C31A
D868 0A RETS
D869 8A 62 2D LD869 LDA @622D
D86C 15 25 XOR R37,A
D86E 26 60 1F BTJO %60,A,LD890
D871 12 16 MOV R22,A
D873 8B 62 4B STA @624B
D876 72 04 27 MOV X04,R39
D879 32 24 MOV R36,B
D87B F5 TRAP 10
D87C 88 62 4F 35 MOVD X624F,R53
D880 AA 61 0C LD880 LDA @610C(B)
D883 9B 35 STA *R53
D885 C2 DEC B
D886 DB 35 DECD R53

1	D888	DA 27 F5	DJNZ R39, LD880
2	D88B	B5	CLR A
3	D88C	8B 62 50	STA @6250
4	D88F	OA	RETS
5	D890	12 25	LD890 MOV R37, A
6	D892	8B 62 51	STA @6251
7	D895	12 16	MOV R22, A
8	D897	8B 62 52	STA @6252
9	D89A	OA	RETS
10	D89B	72 FF 2C	LD89B MOV %FF, R44
11	D89E	E0 02	JMP LD8A2
12	D8A0	D5 2C	LD8A0 CLR R44
13	D8A2	22 AB	LD8A2 MOV %AB, A
14	D8A4	8B 62 7A	STA @627A
15	D8A7	72 08 19	MOV %08, R25
16	D8AA	D5 1A	CLR R26
17	D8AC	52 08	MOV %08, B
18	D8AE	8E F9 90	CALL @F990
19	D8B1	D9 40	POP R64
20	D8B3	D9 3F	POP R63
21	D8B5	B5	CLR A
22	D8B6	8B 62 5F	LD8B6 STA @625F
23	D8B9	88 1A 5E 42	MOVD %1A5E, R66 ;
24	D8BD	F6	LD8BD TRAP 9
25	D8BE	77 01 2C 05	BTJZ %01, R44, LD8C7
26	D8C2	8E D5 ED	CALL @D5ED
27	D8C5	E0 03	JMP LD8CA
28	D8C7	8E D5 CC	LD8C7 CALL @D5CC
29	D8CA	8E D7 E1	LD8CA CALL @D7E1
30	D8CD	12 26	MOV R38, A
31	D8CF	8E D6 A7	CALL @D6A7
32	D8D2	E1 0A	JN LD8DE
33	D8D4	76 01 2C 03	BTJO %01, R44, LD8DB
34	D8D8	8C CC D7	LD8D8 BR @CCD7
35	D8DB	8C D3 C1	LD8DB BR @D3C1
36	D8DE	8E D5 AE	LD8DE CALL @D5AE
37	D8E1	E3 06	JC LD8E9
38	D8E3	76 01 2C F4	BTJO %01, R44, LD8DB
39	D8E7	E0 EF	JMP LD8DS
40	D8E9	12 1A	LD8E9 MOV R26, A
41	D8EB	8D 62 5F	CMPA @625F
42	D8EE	E6 C6	JNZ LD8B6
43	D8F0	DB 42	DEC D R66
44	D8F2	E3 C9	JC LD8BD
45	D8F4	D5 19	CLR R25
46	D8F6	8C CE 15	BR @CE15
47	D8F9	52 78	LD8F9 MOV %78, B ; Put on Line 7
48	D8FB	88 E2 4F 35	MOVD %E24F, R53 ;" ALTERNATE PROGRAM "
49	D8FF	8E C3 0D	CALL @C30D
50	D902	42 27 3A	MOV R39, R58
51	D905	73 1F 3A	AND %1F, R58
52	D908	D3 3A	INC R58
53	D90A	D5 3E	CLR R62
54	D90C	8E D6 74	CALL @D674
55	D90F	12 3A	MOV R58, A
56	D911	52 9B	MOV %9B, B
57	D913	8E F0 B8	CALL @FOB8
58	D916	OA	RETS
59	D917	8A 67 9E	LD917 LDA @679E

D91A	E6 15	JNZ LD931
D91C	72 21 42	MOV %21,R66
D91F	EA	TRAP 21
D920	72 01 21	MOV %01,R33
D923	88 E2 13 35	MOVD %E213,R53 ;" (NOTHING TO REPORT) "
D927	8E C3 18	CALL @C318
D92A	F6	LD92A TRAP 9
D92B	DA 42 FC	DJNZ R66,LD92A
D92E	8C C5 D3	BR @C5D3
D931	8A 67 9B	LD931 LDA @679B
D934	8B 67 9C	STA @679C
D937	B5	CLR A
D938	8B 67 9D	STA @679D
D93B	EA	TRAP 21
D93C	72 0F 21	MOV %0F,R33
D93F	88 E4 68 46	MOVD %E468,R70 ;" DATA REPORT "
		;
D943	8E C3 D4	CALL @C3D4
D946	88 E1 6E 35	LD946 MOVD %E16E,R53 ;" (< OR >) "
D94A	8E C3 18	CALL @C318
D94D	F6	LD94D TRAP 9
D94E	22 04	MOV %04,A ;A=4
D950	52 28	MOV %28,B ;Put on line 3
D952	8E D9 E1	CALL @D9E1
D955	F6	TRAP 9
D956	22 03	MOV %03,A ;A=3
D958	52 3C	MOV %3C,B ;Put on line 4
D95A	8E D9 E1	CALL @D9E1
D95D	F6	TRAP 9
D95E	22 02	MOV %02,A ;A=2
D960	52 50	MOV %50,B ;Put on line 5
D962	8E D9 E1	CALL @D9E1
D965	F6	TRAP 9
D966	22 01	MOV %01,A ;A=1
D968	52 64	MOV %64,B ;Put on line 6
D96A	8E D9 E1	CALL @D9E1
D96D	F6	TRAP 9
D96E	B5	CLR A ;A=0
D96F	52 78	MOV %78,B ;Put on line 7
D971	8E D9 E1	CALL @D9E1
D974	F6	LD974 TRAP 9
D975	88 1A 5E 42	MOVD %1A5E,R66 ;
D979	EC	TRAP 19
D97A	F6	LD97A TRAP 9
D97B	8A 67 9D	LDA @679D
D97E	E6 97	JNZ LD917
D980	DB 42	DECD R66
D982	E3 03	JC LD987
D984	8C CE 15	BR @CE15
D987	12 19	LD987 MOV R25,A
D989	E6 EF	JNZ LD97A
D98B	12 1A	MOV R26,A
D98D	E6 03	JNZ LD992
D98F	8C C5 D3	BR @C5D3
D992	8A 62 55	LD992 LDA @6255 ;Keyboard buffer

;# THIS ADDRESS IS LOADED INTO R56/R57 AT POWER ON AND TRAP8(INT3)

F83B 7D 03 13

LF83B CMP %03,R19

F83E E7 9E

JNC LF7DE

F840 9C 3B

BR *R59

; TRAP 8

F842 D9 37

LF842 POP R55

F844 D9 36

POP R54

F846 E0 96

JMP LF7DE

;

F848 F6

LF848 TRAP 9

F849 E0 FD

JMP LF848

;

; INT 4 - Serial Port

;# THIS IS FOR TAKING COMMANDS FROM THE KEYPAD MICROPROCESSOR. GET HERE

;# WHENEVER A SERIAL FRAME IS RECEIVED.

;

F84B A7 02 11 4F

LF84B BTJZP %02,SSTAT,LF89E ;Serial Status. JMP IF NO

BYTE RECEIVED.

F84F 05

EINT

F850 B8

PUSH A

F851 C8

PUSH B

F852 91 16

MOV P RXBUF,B ;Receive Buffer

F854 5D 7E

CMP %7E,B ;Character = >7E ?

F856 E6 07

JNZ LF85F ;No, continue

F858 22 FF

MOV %FF,A ;Yes, store >FF @L6225

F85A 8B 62 25

STA @L6225

F85D E0 3D

JMP LF89C ;# EXIT

F85F 5D 7D

LF85F CMP %7D,B ;Character = >7D ?

F861 E6 03

JNZ LF866 ;No, continue

F863 8C F3 31

BR @LF331 ;Yes, goto LF331 (REBOOT)

F866 5D 20

LF866 CMP %20,B ;Is B>= >20 ?

F868 E3 32

JC LF89C ;Yes, exit

F86A 5D 0F

CMP %0F,B ;SAT

F86C E2 09

JZ LF877

F86E 5D 0C

CMP %0C,B ;TV

F870 E2 05

JZ LF877

F872 8A 67 E5

LDA @L67E5 ;

F875 E6 25

JNZ LF89C ;

F877 AA DD 66

LF877 LDA @LDD66(B) ;Get key function code

F87A 27 02 02

BTJZ %02,A,LF87F ;>04 means undefined key

F87D D5 19

CLR R25 ;R25=00 if so

F87F 73 DF 1F

LF87F AND %DF,R31

F882 26 01 05

BTJO %01,A,LF88A

F885 7D 03 13

CMP %03,R19

F888 E7 12

JNC LF89C

F88A AA DD 66

LF88A LDA @LDD66(B) ;

F88D 26 04 0C

BTJO %04,A,LF89C ;?

F890 06

DINT

F891 AA DD 86

LDA @LDD86(B) ;R56,57 is address of routine

F894 D0 38

MOV A,R56

F896 AA DD A6

LDA @LDDA6(B)

F899 D0 39

MOV A,R57

F89B 05

EINT

F89C C9

LF89C POP B

		POP A	
1	F89D	B9	
2	F89E	OB	
3		LF89E RETI	
4		; ; 0-9,,<	
5	F89F	22 00	LF89F MOV X00,A ;0
6	F8A1	E0 2F	JMP LF8D2
7	F8A3	22 01	LF8A3 MOV X01,A ;1
8	F8A5	E0 2B	JMP LF8D2
9	F8A7	22 02	LF8A7 MOV X02,A ;2
10	F8A9	E0 27	JMP LF8D2
11	F8AB	22 03	LF8AB MOV X03,A ;3
12	F8AD	E0 23	JMP LF8D2
13	F8AF	22 04	LF8AF MOV X04,A ;4
14	F8B1	E0 1F	JMP LF8D2
15	F8B3	22 05	LF8B3 MOV X05,A ;5
16	F8B5	E0 1B	JMP LF8D2
17	F8B7	22 06	LF8B7 MOV X06,A ;6
18	F8B9	E0 17	JMP LF8D2
19	F8BB	22 07	LF8BB MOV X07,A ;7
20	F8BD	E0 13	JMP LF8D2
21	F8BF	22 08	LF8BF MOV X08,A ;8
22	F8C1	E0 0F	JMP LF8D2
23	F8C3	22 09	LF8C3 MOV X09,A ;9
24	F8C5	E0 0B	JMP LF8D2
25	F8C7	22 0A	LF8C7 MOV X0A,A ;>
26	F8C9	E0 02	JMP LF8CD
27	F8CB	22 0B	LF8CB MOV X0B,A ;<
28	F8CD	7D 01 19	LF8CD CMP X01,R25
29	F8D0	E6 21	JNZ LF8F3
30	F8D2	32 19	LF8D2 MOV R25,B
31	F8D4	E2 1D	JZ LF8F3
32	F8D6	4D 1A 19	CMP R26,R25
33	F8D9	E2 18	JZ LF8F3
34	F8DB	32 1A	MOV R26,B
35	F8DD	AB 62 55	STA @L6255(B)
36	F8E0	D3 1A	INC R26
37	F8E2	52 36	MOV X36,B
38	F8E4	8E F9 50	CALL @LF950
39	F8E7	8A 62 7A	LDA @L627A
40	F8EA	B3	INC A
41	F8EB	8B 62 7A	STA @L627A
42	F8EE	7D 01 19	CMP X01,R25
43	F8F1	E2 27	JZ LF91A ;'ENTER'
44	F8F3	8C F7 DA	LF8F3 BR @LF7DA
45			; CANCEL
46	F8F6	12 19	LF8F6 MOV R25,A
47	F8F8	E2 F9	JZ LF8F3
48	F8FA	22 0C	MOV X0C,A
49	F8FC	32 3F	MOV R63,B
50	F8FE	E2 D2	JZ LF8D2
51			
52	F900	32 1A	MOV R26,B
53	F902	E2 EF	JZ LF8F3
54	F904	C2	DEC B
55	F905	22 FF	MOV XFF,A
56	F907	AB 62 55	STA @L6255(B)
57	F90A	D1 1A	MOV B,R26

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F90C 52 2E      MOV %2E,B
F90E 8A 62 7A    LDA @L627A
F911 B2        DEC A
F912 8B 62 7A    STA @L627A
F915 8E F9 50    CALL @LF950
F918 E0 D9    JMP LF8F3

; ENTER

F91A 32 19      LF91A MOV R25,B
F91C E2 D5      JZ LF8F3
F91E D5 19      CLR R25
F920 32 3F      MOV R63,B
F922 E2 CF      JZ LF8F3
F924 98 40 3B    MOVD R64,R59
F927 E0 CA      JMP LF8F3

; TV

F929 B5        LF929 CLR A
F92A 8B 62 52    STA @L6252
F92D B4        INV A
F92E 8B 67 E5    STA @L67E5
F931 8C CC ED    LF931 BR @LC00D

; SAT

F934 B5        LF934 CLR A
F935 8B 67 E5    STA @L67E5
F938 12 1D      MOV R29,A
F93A 23 7F      AND %7F,A
F93C 2D 04      CMP %04,A
F93E E2 F1      JZ LF931
F940 8C CC D7    BR @LC00D

; Keyboard >18,19,1F

F943 72 05 13    LF943 MOV %05,R19
F946 22 0F      LF946 MOV %0F,A
F948 8E C3 92    CALL @LC392
F94B F6        LF94B TRAP 9
F94C E0 FD      JMP LF94B

F94E E0 F6      JMP LF946
F950 12 3F      LF950 MOV R63,A
F952 E2 0A      JZ LF95E
F954 7D 01 19    CMP %01,R25
F957 E2 05      JZ LF95E
F959 8A 62 7A    LDA @L627A
F95C B6        XCHB A
F95D F3        TRAP 12 ;Write A @B in display memory

F95E 0A        LF95E RETS

; TRAP 20

F95F B6        LF95F XCHB A ;Get B
F960 8B 62 7A    STA @L627A ;
F963 D1 19      MOV B,R25 ;
F965 D5 1A      CLR R26 ;R26=0

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F967 SE F9 90 CALL @LF990 ;Fill B bytes @L6255 w/FF
 F96A D9 40 POP R64
 F96C D9 3F POP R63
 F96E B5 CLR A
 F96F BB 62 5F LF96F STA @L625F
 F972 88 1A 5E 42 MOVD X1A5E,R66 ;R66=6750
 F976 F6 LF976 TRAP 9
 F977 12 1A MOV R26,A
 F979 8D 62 5F CMPA @L625F
 F97C E6 F1 JNZ LF96F
 F97E DB 42 DECD R66
 F980 E3 F4 JC LF976
 F982 D5 19 CLR R25
 F984 8C CE 15 BR @LCE15
 ;
 ; TRAP 19
 ;
 F987 22 01 LF987 MOV X01,A
 F989 D0 19 MOV A,R25 ;R25=01
 F98B D5 1A CLR R26 ;R26=00
 F98D D5 3F CLR R63 ;R63=00
 F98F C0 MOV A,B ;B=01
 F990 22 FF LF990 MOV XFF,A ;A=>FF
 F992 AB 62 54 LF992 STA @L6254(B) ;Fill B bytes @L6255 w/FF
 F995 CA FB DJNZ B,LF992
 F997 0A RETS
 ;
 F998 F7 LF998 TRAP 8
 F999 B5 LF999 CLR A
 F99A BB 62 24 STA @L6224
 F99D BB 62 2B STA @L622B
 F9A0 D5 1B CLR R27
 F9A2 D5 1D CLR R29
 F9A4 12 15 MOV R21,A
 F9A6 72 01 0E MOV X01,R14
 F9A9 BE RL A
 F9AA DF OE RLC R14
 F9AC 52 02 MOV X02,B
 F9AE BE RL A
 F9AF BE RL A
 F9B0 CF RLC B
 F9B1 D1 0F MOV B,R15
 F9B3 8E FC 0A CALL @LFCOA
 F9B6 32 0F MOV R15,B
 F9B8 F5 TRAP 10
 F9B9 AA 61 13 LDA @L6113(B)
 F9BC 23 07 AND X07,A
 F9BE BB 62 54 STA @L6254
 F9C1 AA 61 19 LDA @L6119(B)
 ;
 F9C4 8D 62 33 CMPA @L6233
 F9C7 E6 CF JNZ LF998
 F9C9 AA 61 14 LDA @L6114(B)
 F9CC D0 37 MOV A,R55
 F9CE 12 15 MOV R21,A
 F9D0 15 37 XOR R55,A
 F9D2 26 60 C3 BTJO %60,A,LF998
 F9D5 AA 61 00 LDA @L6100(B)
 F9D8 D0 37 MOV A,R55
 F9DA AA 61 01 LDA @L6101(B)

F9DD	D0	36	MOV A,R54
F9DF	32	0E	MOV R14,B
F9E1	5A	02	SUB %02,B
F9E3	F5		TRAP 10
F9E4	AA	61 00	LDA @L6100(B)
F9E7	1D	37	CMP R55,A
F9E9	E6	A0	JNZ LF998
F9EB	AA	61 01	LDA @L6101(B)
F9EE	1D	36	CMP R54,A
F9F0	E6	A6	JNZ LF998
F9F2	8A	62 12	LDA @L6212
F9F5	1D	37	CMP R55,A
F9F7	E6	9F	JNZ LF998
F9F9	8A	62 13	LDA @L6213
F9FC	1D	36	CMP R54,A
F9FE	E6	98	JNZ LF998
FA00	32	0F	MOV R15,B
FA02	F5		TRAP 10
FA03	8A	62 4B	LDA @L624B
FA06	4D	00 16	CMP R0,R22
FA09	E6	25	JNZ LFA30
FA0B	AA	61 09	LDA @L6109(B)
FA0E	8D	62 4C	CMPA @L624C
FA11	E6	19	JNZ LFA2C
FA13	AA	61 0A	LDA @L610A(B)
FA16	8D	62 4D	CMPA @L624D
FA19	E6	11	JNZ LFA2C
FA1B	AA	61 0B	LDA @L610B(B)
FA1E	8D	62 4E	CMPA @L624E
FA21	E6	09	JNZ LFA2C
FA23	AA	61 0C	LDA @L610C(B)
FA26	8D	62 4F	CMPA @L624F
FA29	8C	FA B2	BR @LFAB2
FA2C	B5		LFA2C CLR A
FA2D	8B	62 4B	STA @L624B
FA30	8A	62 51	LFA30 LDA @L6251
FA33	15	15	XOR R21,A
FA35	26	60 2B	BTJO %60,A,LFA63
FA38	8A	62 52	LDA @L6252
FA3B	E2	26	JZ LFA63
FA3D	12	16	MOV R22,A
FA3F	8B	62 4B	STA @L624B
FA42	AA	61 09	LDA @L6109(B)
FA45	8B	62 4C	STA @L624C
FA48	AA	61 0A	LDA @L610A(B)
FA4B	8B	62 4D	STA @L624D
FA4E	AA	61 0B	LDA @L610B(B)
FA51	8B	62 4E	STA @L624E
FA54	AA	61 0C	LDA @L610C(B)
FA57	8B	62 4F	STA @L624F
FA5A	B5		CLR A
FA5B	8B	62 52	STA @L6252
FA5E	8B	62 50	STA @L6250
FA61	E0	4F	JMP LFAB2
FA63	AA	61 13	LFA63 LDA @L6113(B)
FA66	26	20 09	BTJO %20,A,LFA72
FA69	B5		CLR A
FA6A	AB	61 42	STA @L6142(B)
FA6D	E0	27	JMP LFA96

1	FA6F	8C F9 98	LFA6F BR @LF998
2	FA72	AA 61 19	LFA72 LDA @L6119(B)
3	FA75	AD 61 42	CMPA @L6142(B)
4	FA78	E6 F5	JNZ LFA6F
5	FA7A	AA 61 14	LDA @L6114(B)
6	FA7D	D0 10	MOV A,R16
7	FA7F	AA 61 41	LDA @L6141(B)
8	FA82	15 10	XOR R16,A
9	FA84	26 E0 E8	BTJO XE0,A,LFA6F
10	FA87	AA 61 43	LDA @L6143(B)
11	FA8A	B3	INC A
12	FA8B	E6 E2	JNZ LFA6F
13	FA8D	72 01 1D	MOV Z01,R29
14	FA90	AA 61 44	LDA @L6144(B)
15	FA93	B3	INC A
16	FA94	E6 D9	JNZ LFA6F
17	FA96	D1 37	LFA96 MOV B,R55
18	FA98	52 07	MOV Z07,B
19	FA9A	D6 37	LFA9A XCHB R55
20	FA9C	AA 61 08	LDA @L6108(B)
21	FA9F	D0 36	MOV A,R54
22	FAA1	C2	DEC B
23	FAA2	D6 37	XCHB R55
24	FAA4	AA 61 FF	LDA @L61FF(B)
25	FAA7	16 36 0D	BTJO R54,A,LFAB7
26	FAAA	CA EE	DJNZ B,LFA9A
27	FAAC	72 02 1D	MOV Z02,R29
28	FAAF	8C F9 98	LFAAF BR @LF998
29	FAB2	22 FF	LFAB2 MOV ZFF,A
30	FAB4	8B 62 24	STA @L6224
31	FAB7	72 03 1D	LFAB7 MOV Z03,R29
32	FABA	8A 62 54	LDA @L6254
33	FABD	8D 62 53	CMPA @L6253
34	FAC0	E2 02	JZ LFAC4
35	FAC2	E3 EB	JC LFAAF
36	FAC4	72 04 1D	LFAC4 MOV Z04,R29
37	FAC7	72 FF 1B	MOV ZFF,R27
38	FACA	4D 17 0E	CMP R23,R14
39	FACD	E2 32	JZ LFB01
40	FACF	72 FF 17	MOV ZFF,R23
41	FAD2	22 00	MOV Z00,A
42	FAD4	F9	TRAP 6 ;Write A to DED
43	FAD5	32 0E	MOV R14,B
44	FAD7	5A 02	SUB Z02,B
45	FAD9	F5	TRAP 10
46	FADA	58 03	ADD Z03,B
47	FADC	A8 60 FF 35	MOVD %60FF(B),R53
48	FAEO	72 04 10	MOV Z04,R16
49	FAE3	F8	TRAP 7 ;Write R16 bytes @R52,53 to DED
50	FAE4	F7	TRAP 8
51	FAE5	22 01	MOV Z01,A
52	FAE7	F9	TRAP 6 ;Write A to DED
53	FAE8	F7	TRAP 8
54	FAE9	22 02	MOV Z02,A
55	FAEB	F9	TRAP 6 ;Write A to DED
56	FAEC	88 62 00 35	MOVD %6200,R53
57	FAF0	72 07 10	MOV Z07,R16
58	FAF3	F8	TRAP 7 ;Write R16 bytes @R52,53 to DED
59	FAF4	F7	TRAP 8

FAF5	22 03	MOV X03,A
FAF7	F9	TRAP 6 ;Write A to DED
FAF8	88 62 07 35	MOVD X6207,R53
FAFC	72 0B 10	MOV X0B,R16
FAFF	F8	TRAP 7 ;Write R16 bytes @R52,53 to DED
FB00	F7	TRAP 8
FB01	22 04	LFB01 MOV X04,A
FB03	F9	TRAP 6 ;Write A to DED
FB04	32 0F	MOV R15,B
FB06	F5	TRAP 10
FB07	A8 61 02 35	MOVD X6102(B),R53
FB0B	72 12 10	MOV X12,R16
FBOE	F8	TRAP 7 ;Write R16 bytes @R52,53 to DED
FBOF	D5 1B	CLR R27
FB11	8A 62 24	LDA @L6224
FB14	E2 10	JZ LFB26
FB16	8A 62 50	LDA @L6250
FB19	E6 0B	JNZ LFB26
FB1B	8E DA 3F	CALL @LDA3F
FB1E	8E DA A9	CALL @LDAA9
FB21	22 FF	MOV XFF,A
FB23	8B 62 50	STA @L6250
FB26	F7	LFB26 TRAP 8
FB27	22 07	MOV X07,A
FB29	F9	TRAP 6 ;Write A to DED
FB2A	C5	CLR B
FB2B	F4	LFB2B TRAP 11 ;Read DED/U5 data
FB2C	AB 62 3A	STA @L623A(B)
FB2F	C3	INC B
FB30	5D 0C	CMP X0C,B
FB32	E6 F7	JNZ LFB2B
FB34	4D 17 0E	CMP R23,R14
FB37	E2 02	JZ LFB3B
FB39	F7	TRAP 8
FB3A	F7	TRAP 8
FB3B	42 0E 17	LFB3B MOV R14,R23
FB3E	8A DE 06	LDA @LDE06 ;>36
FB41	8B 62 29	STA @L6229
FB44	8A DE 07	LDA @LDE07 ;>FC
FB47	8B 62 2A	STA @L622A
FB4A	E0 0B	JMP LFB57
FB4C	7D 04 13	LFB4C CMP X04,R19
FB4F	E2 06	JZ LFB57
FB51	D2 1C	DEC R28
FB53	E2 43	JZ LFB98
FB55	E0 03	JMP LFB5A
FB57	72 05 1C	LFB57 MOV X05,R28
FB5A	8A 62 54	LFB5A LDA @L6254
FB5D	8D 62 53	CMPA @L6253
FB60	E2 02	JZ LFB64
FB62	E3 34	JC LFB98
FB64	8A 62 24	LFB64 LDA @L6224
FB67	E6 32	JNZ LFB9B
FB69	12 1D	MOV R29,A
FB6B	E2 2B	JZ LFB98
FB6D	32 0F	MOV R15,B
FB6F	F5	TRAP 10
FB70	AA 61 13	LDA @L6113(B)
FB73	27 20 06	BTJZ X20,A,LFB7C

FB76	AA 61 44	LDA @L6144(B)
FB79	B3	INC A
FB7A	E6 1C	JNZ LFB98
FB7C	D1 37	LFB7C MOV B,R55
FB7E	32 0E	MOV R14,B
FB80	F5	TRAP 10
FB81	72 07 10	MOV X07,R16
FB84	AA 61 00	LFB84 LDA @L6100(B)
FB87	DO 36	MOV A,R54
FB89	C3	INC B
FB8A	D6 37	XCHB R55
FB8C	AA 61 02	LDA @L6102(B)
FB8F	C3	INC B
FB90	D6 37	XCHB R55
FB92	16 36 06	BTJO R54,A,LFB9B
FB95	DA 10 EC	DJNZ R16,LFB84
FB98	8C F9 98	LFB98 BR @LF998
FB9B	32 0F	LFB9B MOV R15,B
FB9D	F5	TRAP 10
FB9E	42 06 37	MOV R6,R55
FBA1	73 F3 37	AND XF3,R55
FBA4	AA 61 13	LDA @L6113(B)
FBA7	27 40 0C	BTJZ X01,A,LFBB6
FBA8	74 04 37	OR X04,R55
FBAD	8A 62 78	LDA @L6278
FBBD	27 01 03	BTJZ X01,A,LFBB6
FBB3	75 0C 37	XOR X0C,R55
FBB6	42 37 06	LFBB6 MOV R55,R6
FBB9	8A 62 32	LDA @L6232
FBBC	AD 61 18	CMPA @L6118(B)
FBBF	E1 25	JN LFBE6
FBC1	E6 12	JNZ LFB05
FBC3	8A 62 31	LDA @L6231
FBC6	AD 61 17	CMPA @L6117(B)
FBC9	E7 1B	JNC LFBE6
FBCB	E6 08	JNZ LFB05
FBCD	8A 62 30	LDA @L6230
FBDD	AD 61 16	CMPA @L6116(B)
FBD3	E7 11	JNC LFBE6
FBD5	AA 61 14	LFB05 LDA @L6114(B)
FBD8	BE	RL A
FBD9	28 40	ADD X40,A
FBDB	BC	RR A
FBDC	8B 62 20	STA @L6220
FBDF	DO 15	MOV A,R21
FBE1	D5 1E	CLR R30
FBE3	8C F7 9F	BR @LF79F
FBE6	8A 62 29	LFBE6 LDA @L6229
FBE9	B3	INC A
FBEA	8B 62 29	STA @L6229
FBED	E6 0C	JNZ LFBFB
FBEF	8A 62 2A	LDA @L622A
FBF2	B3	INC A
FBF3	8B 62 2A	STA @L622A
FBF6	E6 03	JNZ LFBFB
FBF8	8E DA 3F	CALL @LDA3F
FBFB	22 05	LFBFB MOV X05,A
FBFD	F9	TRAP 6 ;Write A to DED
FBFE	88 62 30 35	MOVD X6230,R53

FC02	72 03 10	MOV X03,R16
FC05	F8	TRAP 7 :Write R16 bytes @R52,53 to DED
FC06	F7	TRAP 8
FC07	8C FB 4C	BR @LFB4C
FC0A	32 0E	LFC0A MOV R14,B
FC0C	F5	TRAP 10
FC0D	22 16	MOV %16,A
FC0F	38 00	ADD R0,B
FC11	D1 37	MOV B,R55
FC13	C0	MOV A,B
FC14	D6 37	LFC14 XCHB R55
FC16	AA 60 FE	LDA @L60FE(B)
FC19	C2	DEC B
FC1A	D6 37	XCHB R55
FC1C	AB 61 FE	STA @L61FE(B)
FC1F	CA F3	DJNZ B,LFC14
FC21	0A	RETS
FC22	52 06	LFC22 MOV X06,B
FC24	22 20	MOV %20,A
FC26	AB 62 55	LFC26 STA @L6255(B)
FC29	CA FB	DJNZ B,LFC26
FC2B	32 0F	MOV R15,B
FC2D	F5	TRAP 10
FC2E	AA 61 16	LDA @L6116(B)
FC31	00 3B	MOV A,R59
FC33	AA 61 17	LDA @L6117(B)
FC36	00 3A	MOV A,R58
FC38	AA 61 18	LDA @L6118(B)
FC3B	00 3E	MOV A,R62
FC3D	8A 62 32	LDA @L6232
FC40	00 3D	MOV A,R61
FC42	8A 62 31	LDA @L6231
FC45	C0	MOV A,B
FC46	8A 62 30	LDA @L6230
FC49	4A 00 3B	SUB R0,R59
FC4C	4B 01 3A	SBB R1,R58
FC4F	4B 3D 3E	SBB R61,R62
FC52	E3 01	JC LFC55
FC54	0A	RETS
FC55	52 03	LFC55 MOV X03,B
FC57	22 1F	MOV X1F,A
FC59	B3	LFC59 INC A
FC5A	7A B0 3B	SUB %B0,R59
FC5D	7B 1E 3A	SBB %1E,R58
FC60	7B 04 3E	SBB %04,R62
FC63	E7 05	JNC LFC6A
FC65	CA F2	DJNZ B,LFC59
FC67	8C FC D5	BR @LFC0D5
FC6A	8B 62 56	LFC6A STA @L6256
FC6D	78 B0 3B	ADD %B0,R59
FC70	79 1E 3A	ADC %1E,R58
FC73	79 04 3E	ADC %04,R62
FC76	22 1F	MOV X1F,A
FC78	B3	LFC78 INC A
FC79	7A 78 3B	SUB %78,R59
FC7C	7B 69 3A	SBB %69,R58
FC7F	7B 00 3E	SBB %00,R62
FC82	E3 F4	JC LFC78
FC84	8B 62 57	STA @L6257

FC87	78 78 3B	ADD X78,R59
FC8A	79 69 3A	ADC X69,R58
FC8D	22 1F	MOV X1F,A
FC8F	B3	LFC8F INC A
FC90	7A 94 3B	SUB X94,R59
FC93	7B 11 3A	SBB X11,R58
FC96	E3 F7	JC LFC8F
FC98	8B 62 58	STA @L6258
FC9B	78 94 3B	ADD X94,R59
FC9E	79 11 3A	ADC X11,R58
FCA1	22 1F	MOV X1F,A
FCA3	B3	LFC8F INC A
FCA4	7A C2 3B	SUB XC2,R59
FCA7	7B 01 3A	SBB X01,R58
FCAA	E3 F7	JC LFCA3
FCAC	8B 62 59	STA @L6259
FCAF	78 C2 3B	ADD XC2,R59
FCB2	79 01 3A	ADC X01,R58
FCB5	22 1F	MOV X1F,A
FCB7	B3	LFCB7 INC A
FCB8	7A 4B 3B	SUB X4B,R59
FCBB	7B 00 3A	SBB X00,R58
FCBE	E3 F7	JC LFCB7
FCC0	8B 62 5A	STA @L625A
FCC3	78 4B 3B	ADD X4B,R59
FCC6	48 3B 3B	ADD R59,R59
FCC9	22 1F	MOV X1F,A
FCCB	B3	LFCCB INC A
FCCC	7A 0F 3B	SUB X0F,R59
FCCF	E3 FA	JC LFCCB
FCD1	8B 62 5B	STA @L625B
FCD4	0A	RETS
FCD5	22 22	LFC05 MOV X22,A
FCD7	8B 62 56	STA @L6256
FCDA	22 29	MOV X29,A
FCDC	8B 62 57	STA @L6257
FCDF	8B 62 59	STA @L6259
FCE2	8B 62 5B	STA @L625B
FCE5	22 25	MOV X25,A
FCE7	8B 62 58	STA @L6258
FCEA	8B 62 5A	STA @L625A
FCEI	0A	RETS
FCEE	C8	LFCEE PUSH B
FCEF	72 03 10	MOV X03,R16 ;12 characters
FCF2	88 EB 57 35	MOVD XEB57,R53 ;" TIME LEFT: "
FCF6	12 25	MOV R37,A
FCF8	15 15	XOR R21,A
FCFA	26 60 04	BTJO X60,A,LFD01
FCFD	88 EB 48 35	MOVD XEB48,R53 ;" STARTS IN: "
FDO1	8E C3 1D	LFD01 CALL @LC31D
FDO4	C9	POP B
FDO5	58 0C	ADD X0C,B
FDO7	8A 62 56	LDA @L6256
FDOA	2D 20	CMP X20,A
FDOC	E2 0A	JZ LFD18
FDOE	F3	TRAP 12 ;Write A @B in display memory
FDOF	8A 62 57	LDA @L6257

FD12	F2	TRAP 13 ;Write A to display memory
FD13	8A 62 58	LDA @L6258
FD16	E0 17	JMP LFD2F
FD18	8A 62 57	LFD18 LDA @L6257
FD1B	2D 20	CMP %20,A
FD1D	E6 0F	JNZ LFD2E
FD1F	22 2E	MOV %2E,A ; ;
FD21	F3	TRAP 12 ;Write A @B in display memory
FD22	F2	TRAP 13
FD23	8A 62 58	LDA @L6258
FD26	2D 20	CMP %20,A
FD28	E6 0B	JNZ LFD35
FD2A	22 2E	MOV %2E,A ; ;
FD2C	E0 07	JMP LFD35
FD2E	F3	LFD2E TRAP 12 ;Write A @B in display memory
FD2F	22 1D	LFD2F MOV %1D,A ; ; ;
FD31	F2	TRAP 13 ;Write A to display memory
FD32	8A 62 58	LDA @L6258 ;
FD35	F2	LFD35 TRAP 13
FD36	8A 62 59	LDA @L6259 ;
FD39	F2	TRAP 13
FD3A	22 1D	MOV %1D,A ; ; ;
FD3C	F2	TRAP 13 ;Write A to display memory
FD3D	8A 62 5A	LDA @L625A ;
FD40	F2	TRAP 13
FD41	8A 62 5B	LDA @L625B ;
FD44	F2	TRAP 13
FD45	8A 62 56	LDA @L6256 ;
FD48	2D 20	CMP %20,A
FD4A	E6 03	JNZ LFD4F
FD4C	22 2E	MOV %2E,A ; ;
FD4E	F2	TRAP 13 ;Write A to display memory
FD4F	0A	LFD4F RETS

Trap Vectors

FFD0	DA33	TRAP 23
FFD2	DBF6	TRAP 22
FFD4	D174	TRAP 21
FFD6	F95F	TRAP 20
FFD8	F987	TRAP 19
FFDA	C3D9	TRAP 18
FFDC	C392	TRAP 17
FFDE	FOAF	TRAP 16
FFE0	FOA3	TRAP 15
FFE2	F138	TRAP 14 (Not Used)
FFE4	FO8E	TRAP 13
FFE6	F07F	TRAP 12
FFE8	F04F	TRAP 11
FFEA	F42C	TRAP 10
FFEC	F7D6	TRAP 9
FFEE	F842	TRAP 8
FFF0	F071	TRAP 7
FFF2	F02C	TRAP 6
FFF4	F138	INT 5 - TIMER 2 (Not Used)
FFF6	F84B	INT 4 - SERIAL PORT
FFF8	F4D9	INT 3 - EXTERNAL - U24P26, USP14
FFFA	F138	INT 2 - TIMER 1 (Not Used)
FFFC	F443	INT 1 - EXTERNAL - U24P1
FFFE	FOE3	INT 0 - RESET - INITIAL P.C.

24
25 D995 2D 0B CMP %OB,A ;
26 D997 E2 25 JZ LD9BE
27 D999 2D 0A CMP %OA,A ;
28 D99B E2 02 JZ LD99F
29 D99D E0 D5 JMP LD974
30 D99F 8A 67 9C LD99F LDA @679C
31 D9A2 8D 67 9B CMPA @679B
32 D9A5 E6 10 JNZ LD9B7
33 D9A7 88 E2 04 35 MOVD %E204,R53 ;"(NO NEWER REPORT)"
34 D9AB 72 21 42 LD9AB MOV %21,R66
35 D9AE 8E C3 18 CALL @C318
36 D9B1 F6 LD9B1 TRAP 9
37 D9B2 DA 42 FC DJNZ R66,LD9B1
38 D9B5 E0 8F JMP LD946
39 D9B7 B3 LD9B7 INC A
40 D9B8 E8 TRAP 23
41 D9B9 8B 67 9C STA @679C
42 D9BC E0 8F JMP LD94D
43 D9BE 8A 67 9C LD9BE LDA @679C
44 D9C1 2A 05 SUB %05,A
45 D9C3 E8 TRAP 23
46 D9C4 8D 67 9B CMPA @679B
47 D9C7 E2 07 JZ LD9D0
48 D9C9 2C 07 MPY %07,A
49 D9CB AA 67 9F LDA @679F(B)
50 D9CE E6 06 JNZ LD9D6
51 D9D0 88 E1 F5 35 LD9D0 MOVD %E1F5,R53 ;"(NO OLDER REPORT)"
52 D9D4 E0 D5 JMP LD9AB
53 D9D6 8A 67 9C LD9D6 LDA @679C
54 D9D9 B2 DEC A
55 D9DA E8 TRAP 23
56 D9DB 8B 67 9C STA @679C
57 D9DE 8C D9 4D BR @D94D
58 D9E1 D1 3E LD9E1 MOV B,R62
59 D9E3 D0 23 MOV A,R35
60 D9E5 88 E8 A5 35 MOVD %E8A5,R53 ;"
61 D9E9 8E C3 1A CALL @C31A
62 D9EC 8A 67 9C LDA @679C

D9F4 D1 23 MOV B,R35
D9F6 AA 67 9F LDA @679F(B)
D9F9 E6 01 JNZ LD9FC
D9FB 0A RETS
D9FC 32 3E LD9FC MOV R62,B
D9FE FF TRAP 16
D9FF 32 23 MOV R35,B
DA01 58 06 ADD Z06,B
DA03 72 06 10 MOV Z06,R16
DA06 B5 CLR A
DA07 AD 67 9F LDA07 CMPA @679F(B)
DA0A E6 07 JNZ LDA13
DA0C C2 DEC B
DA0D DA 10 F7 DJNZ R16,LDA07
DA10 22 2E MOV Z2E,A ;
DA12 F2 TRAP 13 :Write A to display memory
DA13 32 23 LDA13 MOV R35,B

DA15	A8 67 A0 35	MOVD %67A0(B), R53
DA19	32 3E	MOV R62,B
DA1B	58 03	ADD %03,B
DA1D	42 10 3E	MOV R16,R62
DA20	8E CA 8C	CALL @CA8C
DA23	32 23	MOV R35,B
DA25	A8 67 9F 35	MOVD %679F(B), R53
DA29	42 3E 10	MOV R62,R16
DA2C	D3 10	INC R16
DA2E	8E CA B5	CALL @CAB5
DA31	F0	TRAP 15
DA32	0A	RETS
		;
		; TRAP 23
		;
DA33	E1 07	LDA33 JN LDA3C ;Jump if A<1
DA35	2D 0A	CMP %0A,A
DA37	E7 02	JNC LDA3B ;Jump if A<=0A
DA39	2A 0A	SUB %0A,A
DA3B	0A	LDA3B RETS
DA3C	28 0A	LDA3C ADD %0A,A
DA3E	0A	RETS
		;
DA3F	32 0F	LDA3F MOV R15,B
DA41	F5	TRAP 10
DA42	AA 61 1B	LDA @611B(B)
DA45	D0 10	MOV A,R16
DA47	2D 30	CMP %30,A
DA49	E7 01	JNC LDA4C
DA4B	0A	RETS
DA4C	AA 61 1A	LDA4C LDA @611A(B)
DA4F	E6 01	JNZ LDA52
DA51	0A	RETS
DA52	8E DA 7B	LDA52 CALL @DA7B
DA55	12 10	MOV R16,A
DA57	BC	RR A
DA58	BC	RR A
DA59	BC	RR A
DA5A	23 0F	AND %0F,A
DA5C	38 00	ADD R0,B
DA5E	C3	INC B
DA5F	D6 10	XCHB R16
DA61	53 07	AND %07,B
DA63	AA C1 64	LDA @C164(B)
DA66	32 10	MOV R16,B
DA68	D0 10	MOV A,R16
DA6A	AA 67 9F	LDA @679F(B)
DA6D	14 10	OR R16,A
DA6F	AB 67 9F	STA @679F(B)
DA72	22 FF	MOV %FF,A
DA74	8B 67 9E	STA @679E
DA77	8B 67 9D	STA @679D
DA7A	0A	RETS
DA7B	D0 34	LDA7B MOV A,R52
DA7D	22 09	MOV %09,A
DA7F	2C 07	MPLY %07,A
		;
DA81	12 34	MOV R52,A
DA83	AD 67 9F	LDA83 CMPA @679F(B)
DA86	E2 20	JZ LDA88

1	DASS	5A 07	SUB X07,B
2	DASA	E3 F7	JC LDA83
3	DASC	8A 67 9B	LDA @679B
4	DA8F	B3	INC A
5	DA90	E8	TRAP 23
6	DA91	8B 67 9B	STA @679B
7	DA94	2C 07	MPY X07,A
8	DA96	12 34	MOV R52,A
9	DA98	AB 67 9F	STA @679F(B)
10	DA9B	B5	CLR A
11	DA9C	58 06	ADD X06,B
12	DA9E	72 06 34	MOV X06,R52
13	DAA1	AB 67 9F	LDAA1 STA @679F(B)
14	DAA4	C2	DEC B
15	DAA5	DA 34 F9	DJNZ R52,LDAA1
16	DAA8	0A	LDAA8 RETS
17	DAA9	8A 67 96	LDAA9 LDA @6796
18	DAAC	B3	INC A
19	DAAD	E9	TRAP 22
20	DAAE	8B 67 96	STA @6796
21	DAB1	8D 67 97	CMPA @6797
22	DAB4	E6 05	JNZ LDABB
23	DAB6	B3	INC A
24	DAB7	E9	TRAP 22
25	DAB8	8B 67 97	STA @6797
26	DABB	8A 67 9A	LDABB LDA @679A
27	DABE	E6 0B	JNZ LDACB
28	DAC0	22 FF	MOV XFF,A
29	DAC2	8B 67 9A	STA @679A
30	DAC5	8A 67 96	LDA @6796
31	DAC8	8B 67 97	STA @6797
32	DACB	8A 67 96	LDACB LDA @6796
33	DACE	2C 24	MPY X24,A
34	DADO	88 65 C1 35	MOVD X65C1,R53
35	DAD4	48 01 35	ADD R1,R53
36	DAD7	49 00 34	ADC R0,R52
37	DADA	32 0F	MOV R15,B
38	DADC	F5	TRAP 10
39	DADD	AA 61 12	LDA @6112(B)
40	DAE0	9B 35	STA *R53
41	DAE2	DB 35	DECD R53
42	DAE4	AA 61 11	LDA @6111(B)
43	DAE7	9B 35	STA *R53
44	DAE9	DB 35	DECD R53
45	DAEB	32 0F	MOV R15,B
46	DAED	58 02	ADD X02,B
47	DAEF	F5	TRAP 10
48	DAFO	58 21	ADD X21,B
49	DAF2	72 22 10	MOV X22,R16
50	DAF5	AA 61 01	LDafs LDA @6101(B)
51	DAF8	9B 35	STA *R53
52	DAFA	DB 35	DECD R53
53	DAFC	C2	DEC B
54	DAFD	DA 10 F5	DJNZ R16,LDafs
55	DB00	0A	RETS
56			; Setup 7 - Purchase History
57	DB01	8A 67 9A	LDB01 LDA @679A

1	DB04	E6 15	JNZ LDB1B
2	DB06	72 21 42	MOV %21,R66
3	DB09	EA	TRAP 21
4	DB0A	72 01 21	MOV %01,R33
5	DB0D	88 E1 E6 35	MOVD %E1E6,R53 ;" (NO PURCHASES) "
6	DB11	8E C3 18	CALL @C318
7	DB14	F6	LDB14 TRAP 9
8	DB15	DA 42 FC	DJNZ R66,LDB14
9	DB18	8C C5 D3	BR @C5D3
10	DB1B	8A 67 96	LDB1B LDA @6796
11	DB1E	8B 67 98	STA @6798
12	DB21	8B 67 99	STA @6799
13	DB24	EA	TRAP 21
14	DB25	72 07 21	MOV %07,R33
15	DB28	22 2E	LDB28 MOV %2E,A
16	DB2A	8E C3 8D	CALL @C38D
17	DB2D	F6	TRAP 9
18	DB2E	8A 67 98	LDA @6798
19	DB31	8D 67 97	CMPA @6797
20	DB34	E2 09	JZ LDB3F
21	DB36	2A 01	SUB %01,A
22	DB38	E9	TRAP 22
23	DB39	52 00	MOV %00,B
24	DB3B	8E DB C4	CALL @DBC4
25	DB3E	F6	TRAP 9
26	DB3F	8A 67 98	LDB3F LDA @6798
27	DB42	52 50	MOV %50,B
28	DB44	8E DB C4	CALL @DBC4
29	DB47	F6	TRAP 9
30	DB48	88 E1 6E 35	LDB48 MOVD %E16E,R53 ;" (< OR >) "
31	DB4C	8E C3 18	CALL @C318
32	DB4F	EC	TRAP 19
33	DB50	88 1A 5E 42	MOVD %1A5E,R66 ;
34	DB54	F6	LDB54 TRAP 9
35	DB55	8A 67 96	LDA @6796
36	DB58	8D 67 99	CMPA @6799
37	DB5B	E6 A4	JNZ LDB01
38	DB5D	DB 42	DEC D R66
39	DB5F	E3 03	JC LDB64
40	DB61	8C CE 15	BR @CE15
41	DB64	12 19	LDB64 MOV R25,A
42	DB66	E6 EC	JNZ LDB54
43	DB68	12 1A	MOV R26,A
44	DB6A	E6 03	JNZ LDB6F
45	DB6C	8C C5 D3	BR @C5D3
46	DB6F	8A 62 55	LDB6F LDA @6255
47	DB72	2D 0B	CMP %0B,A
48	DB74	E2 26	JZ LDB9C
49	DB76	2D 0A	CMP %0A,A
50	DB78	E2 02	JZ LDB7C
51	DB7A	E0 CC	JMP LDB48
52	DB7C	8A 67 98	LDB7C LDA @6798
53	DB7F	8D 67 96	CMPA @6796
54	DB82	E6 10	JNZ LDB94
55	DB84	88 E1 D7 35	MOVD %E1D7,R53 ;" (NO NEWER HISTORY) "
56	DB88	72 21 42	LDB88 MOV %21,R66
57	DB8B	8E C3 18	CALL @C318
58	DB8E	F6	LDB8E TRAP 9

DB8F	DA 42 FC	DJNZ R66,LDB8E
DB92	E0 B4	JMP LDB48
DB94	28 02	LDB94 ADD X02,A
DB96	E9	TRAP 22
DB97	8B 67 98	STA @6798
DB9A	E0 8C	JMP LDB28
DB9C	8A 67 98	LDB9C LDA @6798
DB9F	8D 67 97	CMPA @6797
DBA2	E2 0E	JZ LDBB2
DBA4	2A 01	SUB X01,A
DBA6	E9	TRAP 22
DBA7	8D 67 97	CMPA @6797
DBAA	E2 06	JZ LDBB2
DBAC	8E DC 02	CALL @DC02
DBAF	E6 07	JNZ LDB88
DBB1	B9	POP A
DBB2	88 E1 C8 35	LDBB2 MOVD XE1C8,R53 ; "(NO OLDER HISTORY)"
DBB6	E0 D0	JMP LDB88
DBB8	8A 67 98	LDBB8 LDA @6798
DBBB	2A 02	SUB X02,A
DBBD	E9	TRAP 22
DBBE	8B 67 98	STA @6798
DBC1	8C DB 28	BR @DB28
DBC4	D1 26	LDBC4 MOV B,R38
DBC6	D0 27	MOV A,R39
DBC8	8E DC 02	CALL @DC02
DBCB	E6 01	JNZ LDBCE
DBCD	0A	RETS
DBCE	D5 3E	LDBCE CLR R62
DBD0	8E D6 74	CALL @D674
DBD3	32 26	MOV R38,B
DBD5	58 0D	ADD X0D,B
DBD7	8E D6 89	CALL @D689
DBDA	7A 1E 46	SUB X1E,R70
DBDD	7B 00 45	SBB X00,R69
DBEO	32 26	MOV R38,B
DBE2	8E DC 3B	CALL @DC3B
DBE5	78 04 46	ADD X04,R70
DBE8	79 00 45	ADC X00,R69
DBEB	98 46 35	MOVD R70,R53
DBEE	32 26	MOV R38,B
DBFO	58 14	ADD X14,B
DBF2	8E C3 0D	CALL @C30D
DBF5	0A	RETS
	:	;
		TRAP 22
		;
DBF6	E1 07	LDBF6 JN LDBFF ; Jump if AK<1
DBF8	2D 0E	CMP X0E,A
DBFA	E7 02	JNC LDBFE ; Jump if AK=OE
		;
DBFC	2A 0E	SUB X0E,A
DBFE	0A	LDBFE RETS
DBFF	28 0E	LDBFF ADD X0E,A
		;
DC01	0A	RETS
		;
DC02	2C 24	LDC02 MPY X24,A
DC04	88 65 C1 46	MOVD X65C1,R70
DC08	48 01 46	ADD R1,R70
DC0B	49 00 45	ADC R0,R69

0 DCOE 9A 46 LDA *R70
DC10 D0 3A MOV A, R58
DC12 DB 46 DECD R70
1 DC14 9A 46 LDA *R70
DC16 DB 46 DECD R70
2 DC18 D0 3B MOV A, R59
3 DC1A 14 3A OR R58, A
4 DC1C 0A RETS
5 DC1D C0 LDC1D MOV A, B
6 DC1E B5 CLR A
7 DC1F 72 08 3B MOV %08, R59
8 DC22 CE LDC22 RL B
9 DC23 1E 00 DAC R0, A
10 DC25 DA 3B FA DJNZ R59, LDC22
11 DC28 8C F0 A3 BR @FOA3
12 DC2B C8 LDC2B PUSH B
13 DC2C C0 MOV A, B
14 DC2D B5 CLR A
15 DC2E 72 08 3B MOV %08, R59
16 DC31 CE LDC31 RL B
17 DC32 1E 00 DAC R0, A
18 DC34 DA 3B FA DJNZ R59, LDC31
19 DC37 C9 POP B
20 DC38 8C F0 AF BR @FOAF
21 DC3B C8 LDC3B PUSH B
22 DC3C 9A 46 LDA *R70
23 DC3E C0 MOV A, B
24 DC3F BC RR A
25 DC40 BC RR A
26 DC41 23 3F AND %3F, A
27 DC43 28 54 ADD %54, A
28 DC45 8B 62 85 STA @6285
29 DC48 DB 46 DECD R70
30 DC4A 9A 46 LDA *R70
31 DC4C BE RL A
32 DC4D CF RLC B
33 DC4E BE RL A
34 DC4F CF RLC B
35 DC50 53 0F AND %0F, B
36 DC52 62 MOV B, A
37 DC53 8B 62 86 STA @6286
38 DC56 9A 46 LDA *R70
39 DC58 C0 MOV A, B
40 DC59 BC RR A
41 DC5A 23 1F AND %1F, A
42 DC5C 8B 62 87 STA @6287
43 DC5F DB 46 DECD R70
44 DC61 9A 46 LDA *R70
45 DC63 BE RL A
46 DC64 CF RLC B
47 DC65 BE RL A
48 DC66 CF RLC B
49 DC67 BE RL A
50 DC68 CF RLC B
51 DC69 BE RL A
52 DC6A CF RLC B
53 DC6B 53 1F AND %1F, B
54 DC6D 62 MOV B, A
55 DC6E 8B 62 88 STA @6288

DC71 9A 46 LDA *R70
 DC73 C0 MOV A,B
 DC74 DB 46 DECD R70
 DC76 9A 46 LDA *R70
 DC78 BE RL A
 DC79 CF RLC B
 DC7A BE RL A
 DC7B CF RLC B
 DC7C 53 3F AND %3F,B
 DC7E 62 MOV B,A
 DC7F 8B 62 89 STA @6289
 DC82 9A 46 LDA *R70
 DC84 23 3F AND %3F,A
 DC86 8B 62 8A STA @628A
 DC89 9A 61 FE LDA @61FE
 DC8C 23 1F AND %1F,A
 DC8E C0 MOV A,B
 DC8F 8B 62 88 3B MOVD %6288,R59
 DC93 9A 3B LDA *R59
 DC95 68 ADD B,A
 DC96 2D 18 CMP %18,A
 DC98 E7 38 JNC LDOD2
 DC9A 2A 18 SUB %18,A
 DC9C 9B 3B STA *R59
 DC9E 8A 62 86 LDA @6286
 DCA1 C0 MOV A,B
 DCA2 DB 3B DECD R59
 DCA4 9A 3B LDA *R59
 DCA6 B3 INC A
 DCA7 AD DD 25 CMPA @DD25(B)
 DCAA E7 26 JNC LDOD2
 DCAC 5D 02 CMP %02,B
 DCAE E6 0C JNZ LDCBC
 DCBO B6 XCHB A
 DCB1 8A 62 85 LDA @6285
 DCB4 26 03 05 BTJ0 %03,A,LDCBC
 DCB7 B6 XCHB A
 DCB8 2D 1E CMP %1E,A
 DCBA E7 16 JNC LDOD2
 DCBC 22 01 LDCBC MOV %01,A
 DCBE 9B 3B STA *R59
 DCBO DB 3B DECD R59
 DCC2 9A 3B LDA *R59
 DCC4 B3 INC A
 DCC5 2D 0D CMP %0D,A
 DCC7 E6 09 JNZ LDOD2
 DCC9 22 01 MOV %01,A
 DCCB 9B 3B STA *R59
 DCCD DB 3B DECD R59
 DCCF 9A 3B LDA *R59
 DCD1 B3 INC A
 DCD2 9B 3B LDOD2 STA *R59
 DCD4 C9 POP B
 DCD5 8A 62 87 LDA @6287
 DCD8 8E DC 2B CALL @DC2B
 DCDB 8A 62 86 LDA @6286
 DCDE C0 MOV A,B
 DCDF 18 00 ADD R0,A
 DCE1 38 00 ADD R0,B

1	DCE3	A8 DD 2F 35	MOVD %DD2F(B),R53
2	DCE7	72 01 10	MOV %01,R16
3	DCEA	8E C3 37	CALL @C337
4	DCED	22 2E	MOV %2E,A ;"
5	DCEF	F2	TRAP 13 ;Write A to display memory
6	DCFO	8A 62 88	LDA @6288
7	DCF3	E6 02	JNZ LDCF7
8	DCF5	28 OC	ADD %OC,A
9	DCF7	2D OD	LDCF7 CMP %OD,A
10	DCF9	E7 02	JNC LDCFD
11	DCFB	2A OC	SUB %OC,A
12	DCFD	C0	LDCFD MOV A,B
13	DCFE	22 2E	MOV %2E,A ;"
14	DD00	5D 0A	CMP %OA,B
15	DD02	E7 04	JNC LDD08
16	DD04	22 21	MOV %21,A
17	DD06	5A 0A	SUB %OA,B
18	DD08	F2	LDD08 TRAP 13 ;Write A to display memory
19	DD09	62	MOV B,A
20	DD0A	28 20	ADD %20,A
21	DD0C	F2	TRAP 13 ;Write A to display memory
22	DD0D	22 1D	MOV %1D,A ;":"
23	DD0F	F2	TRAP 13 ;Write A to display memory
24	DD10	8A 62 89	LDA @6289
25	DD13	8E DC 1D	CALL @DC1D
26	DD16	C5	CLR B
27	DD17	8A 62 88	LDA @6288
28	DD1A	2D OC	CMP %OC,A
29	DD1C	E7 02	JNC LDD20
30	DD1E	52 12	MOV %12,B ;"P"
31	DD20	62	LDD20 MOV B,A
32	DD21	F2	TRAP 13 ;Write A to display memory
33	DD22	22 OC	MOV %OC,A ;"M"
34	DD24	F2	TRAP 13 ;Write A to display memory
35	DD25	0A	LDD25 RETS
36	;		
37	; Month Table		
38	;		
39	DD26	20	DB >20
40	DD27	1D	DB >1D
41	DD28	20	DB >20
42	DD29	1F	DB >1F
43	DD2A	20	DB >20
44	DD2B	1F	DB >1F
45	;		
46	DD2C	20	DB >20
47	DD2D	20	DB >20
48	DD2E	1F	DB >1F
49	DD2F	20	LDD2F DB >20
50	DD30	1F	DB >1F
51	DD31	20	DB >20
52	DD32	D4 90 10	DB >D4,90,10 ;"-JAN"
53	DD35	D4 51 01	DB >D4,51,01 ;"-FEB"
54	DD38	D4 C0 14	DB >D4,C0,14 ;"-MAR"
55	DD3B	D4 04 94	DB >D4,04,94 ;"-APR"
56	DD3E	D4 C0 1B	DB >D4,C0,1B ;"-MAY"
57	DD41	D4 95 D0	DB >D4,95,D0 ;"-JUN"
58	DD44	D4 95 CB	DB >D4,95,CB ;"-JUL"
59	DD47	D4 05 C6	DB >D4,05,C6 ;"-AUG"
60	DD4A	D5 51 12	DB >D5,51,12 ;"-SEP"

0 DD4D D5 10 96 DB >D5,10,96 ;"-OCT"
0 DD50 D5 04 58 DB >D5,04,58 ;"-NOV"
0 DD53 D4 31 02 DB >D4,31,02 ;"-DEC"

4 ;
5 ;
6 ;
7 DD56 OB 05 25 OB LDD56 DB >OB,05,25,OB,49,12,8F,1D
8 DD5E FF 37 FF 8F DB >FF,37,FF,8F,FF,8F,FF,8F
9 ;

10 DD66 00 LDD66 DB >00 ;0
11 DD67 00 DB >00 ;1
12 DD68 00 DB >00 ;2

13 DD69 00 DB >00 ;3
14 DD6A 00 DB >00 ;4
15 DD6B 00 DB >00 ;5

16 DD6C 00 DB >00 ;6
17 DD6D 00 DB >00 ;7
18 DD6E 00 DB >00 ;8

19 DD6F 00 DB >00 ;9
20 DD70 00 DB >00 ;CANCEL
21 DD71 04 DB >04 ;

22 DD72 01 DB >01 ;TV
23 DD73 04 DB >04 ;

24 DD74 04 DB >04 ;
25 DD75 01 DB >01 ;SAT
26 DD76 04 DB >04 ;
27 DD77 02 DB >02 ;HELP

28 DD78 02 DB >02 ;SETUP
29 DD79 02 DB >02 ;VIEW
30 DD7A 02 DB >02 ;TEXT

31 DD7B 02 DB >02 ;MESSAGE
32 DD7C 02 DB >02 ;NEXT PRG
33 DD7D 00 DB >00 ;ENTER

34 DD7E 04 DB >04 ;
35 DD7F 04 DB >04 ;
36 DD80 04 DB >04 ;

37 DD81 04 DB >04 ;
38 DD82 00 DB >00 ;>
39 DD83 00 DB >00 ;<

40 DD84 04 DB >04 ;
41 DD85 04 DB >04 ;
42 ;

43 DD86 F8 LDD86 DB LF89F/256 ;0
44 DD87 F8 DB LF8A3/256 ;1
45 DD88 F8 DB LF8A7/256 ;2

46 DD89 F8 DB LF8AB/256 ;3
47 DD8A F8 DB LF8AF/256 ;4
48 DD8B F8 DB LF8B3/256 ;5

49 DD8C F8 DB LF8B7/256 ;6
50 DD8D F8 DB LF8BB/256 ;7
51 DD8E F8 DB LF8BF/256 ;8

52 DD8F F8 DB LF8C3/256 ;9
53 DD90 F8 DB LF8F6/256 ;CANCEL
54 DD91 F8 DB LF8F3/256 ;

55 DD92 F9 DB LF929/256 ;TV
56 DD93 F8 DB LF8F3/256 ;
57 DD94 F8 DB LF8F3/256 ;

58 DD95 F9 DB LF934/256 ;SAT
59 DD96 F9 DB LF946/256 ;
60 DD97 D1 DB LD138/256 ;HELP

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DD98 C5          DB LC5D3/256 ;SETUP
DD99 CC          DB LCCD7/256 ;VIEW
DD9A CA          DB LCAD9/256 ;TEXT
DD9B CF          DB LCFD7/256 ;MESSAGE
DD9C D3          DB LD3C1/256 ;NEXT PRG
DD9D F9          DB LF91A/256 ;ENTER
DD9E F9          DB LF943/256 ;
DD9F F9          DB LF943/256 ;
DDA0 F8          DB LF8F3/256 ;
DDA1 F8          DB LF8F3/256 ;
DDA2 F8          DB LF8C7/256 ;>
DDA3 F8          DB LF8CB/256 ;<
DDA4 F8          DB LF8F3/256 ;
DDA5 F9          DB LF943/256 ;
;
DDA6 9F          LDDA6 DB LF89F MOD 256 ;0
DDA7 A3          DB LF8A3 MOD 256 ;1
DDA8 A7          DB LF8A7 MOD 256 ;2
DDA9 AB          DB LF8AB MOD 256 ;3
DDAA AF          DB LF8AF MOD 256 ;4
DDAB B3          DB LF8B3 MOD 256 ;5
DDAC B7          DB LF8B7 MOD 256 ;6
DDAD BB          DB LF8BB MOD 256 ;7
DDAE BF          DB LF8BF MOD 256 ;8
DDAF C3          DB LF8C3 MOD 256 ;9
DDB0 F6          DB LF8F6 MOD 256 ;CANCEL
DDB1 F3          DB LF8F3 MOD 256 ;
DDB2 29          DB LF929 MOD 256 ;TV
DDB3 F3          DB LF8F3 MOD 256 ;
DDB4 F3          DB LF8F3 MOD 256 ;
DDB5 34          DB LF934 MOD 256 ;SAT
DDB6 46          DB LF946 MOD 256 ;
DDB7 38          DB LD138 MOD 256 ;HELP
DDB8 D3          DB LC5D3 MOD 256 ;SETUP
DDB9 D7          DB LCCD7 MOD 256 ;VIEW
DDBA D9          DB LCAD9 MOD 256 ;TEXT
DDBB D7          DB LCFD7 MOD 256 ;MESSAGE
DDBC C1          DB LD3C1 MOD 256 ;NEXT PRG
DDBD 1A          DB LF91A MOD 256 ;ENTER
;
DDBE 43          DB LF943 MOD 256 ;
DDBF 43          DB LF943 MOD 256 ;
DDC0 F3          DB LF8F3 MOD 256 ;
DDC1 F3          DB LF8F3 MOD 256 ;
DDC2 C7          DB LF8C7 MOD 256 ;>
DDC3 CB          DB LF8CB MOD 256 ;<
DDC4 F3          DB LF8F3 MOD 256 ;
DDC5 43          DB LF943 MOD 256 ;
;
; Remote Commands (received commands execute address pointer)
;
DDC6 F2 F2 F2 F2 F2 F2 F3 F3 C0 CF C0 F3 C0 F3 F3 F3 F3 C1 C1 F3 F3 F3 F3
DDDE F3 F3 F3 F3 F3 F3 F3
;
DDE6 4C 4C 68 68 D8 D8 00 00 4D 02 23 98 02 8B 8A 8A 8A D7 DB 8A 8A 8A 8A
DDFE 8A 8A 8A 8A 8A 8A 4B 07
;
DE06 36          LDE06 DB >36
DE07 FC          LDE07 DB >FC
;

```

; " DIAGNOSTIC DATA "
DE08 BA EB 83 20 LDE08 DB >BA,EB,83,20,01,90,45,55,88,0A,E0,C0,58,0B,AE
; " NO SUBSCRIPTION "
DE17 BA E4 11 BA LDE17 DB >BA,E4,11,BA,E5,57,05,50,94,21,25,88,45,0B,AE
; " IS AUTHORIZED "
DE26 B8 85 6E 01 DB >B8,85,6E,01,75,87,45,42,1C,10,3B,AE,BA,EB,AE
; " COST: "
DE35 B8 24 55 59 LDE35 DB >B8,24,55,59,DB,AE,BA,EB,AE,BA,EB,AE,BA,EB,AE
; " RATING: "
DE44 B9 40 16 21 LDE44 DB >B9,40,16,21,01,9D,BA,EB,AE,BA,EB,AE,BA,EB,AE
; " CREDIT: "
DE53 B8 25 04 0C LDE53 DB >B8,25,04,0C,85,9D,BA,EB,AE,BA,EB,AE,BA,EB,AE
; " CREDIT: "
DE62 09 41 03 21 LDE62 DB >09,41,03,21,67,6E,BA,EB,AE,BA,EB,AE,BA,EB,AE
; " CREDIT VERIFICATION: "
DE71 09 41 03 21 LDE71 DB >09,41,03,21,6B,98,11,42,05,20,20,16,21,14,1D
; " PROGRAM RATING "
DE80 BA EB 92 51 LDE80 DB >BA,EB,92,51,11,94,00,CB,94,01,62,10,1A,EB,AE
; " PURCHASE PASSWORD "
DE8F B9 25 D4 08 LDE8F DB >B9,25,D4,08,70,15,12,E4,80,55,56,51,50,3B,AE
; " PURCHASE PASSWORD "
DE9E B9 25 D4 08 LDE9E DB >B9,25,D4,08,70,15,12,EB,92,01,55,59,45,40,EE
; " PASSWORD "
DEAD BA EB AE BA LDEAD DB >BA,EB,AE,BA,E4,80,55,56,51,50,3B,AE,BA,EB,AE
; " (NOT ENOUGH CREDIT) "
DEBC 7D 04 56 B8 LDEBC DB >7D,04,56,B8,44,11,5C,61,EE,B8,25,04,0C,85,AF
; " INFORMATION IS "
DEC8 BA EB 88 40 LDEC8 DB >BA,EB,88,40,54,54,30,05,88,45,0B,88,56,EB,AE
; " NOT AVAILABLE "
DEDA BA EB 90 45 LDEDA DB >BA,EB,90,45,6B,AE,01,80,08,2C,00,4B,12,EB,AE
; " WAS INCORRECT "
DEE9 BA EB 99 01 DB >BA,EB,99,01,5B,AE,21,00,91,51,41,02,5A,EB,AE
; " 1: INSTALLATION "
DEF8 85 DB 88 41 LDEF8 DB >85,DB,88,41,55,80,2C,B0,16,21,14,2E,BA,EB,AE
; " 2: UNIT SETTINGS "
DF07 89 DB 97 40 DB >89,DB,97,40,85,AE,54,45,96,21,01,25,BA,EB,AE
; " 3: RATING CEILING "
DF16 8D DB 94 01 DB >8D,DB,94,01,62,10,1A,E0,84,20,B2,10,1A,EB,AE
; " 4: RATING PASSWORD "
DF25 91 DB 94 01 DB >91,DB,94,01,62,10,1A,E4,80,55,56,51,50,3B,AE
; " 5: PURCHASE PASSWORD "
DF34 95 DB 92 50 LDF34 DB >95,DB,92,50,40,87,01,51,2E,48,05,55,65,15,03
; " 6: CREDIT DISPLAY "
DF43 99 DB 82 50 DB >99,DB,82,50,40,C8,5A,E0,C8,55,22,C0,6E,EB,AE
; " 7: PURCHASE HISTORY "
DF52 9D DB 92 50 DB >9D,DB,92,50,40,87,01,51,2E,1C,85,56,45,46,EE
; " 8: DATA REPORT "
DF61 A1 DB 83 01 LDF61 DB >A1,DB,83,01,60,2E,50,44,91,51,6B,AE,BA,EB,AE
; " 5: DATA REPORT "
DF70 95 DB 83 01 LDF70 DB >95,DB,83,01,60,2E,50,44,91,51,6B,AE,BA,EB,AE
; " (ENTER 1 TO 4) "
DF7F 7E EB AE 11 LDF7F DB >7E,EB,AE,11,05,84,52,E8,6E,59,1B,A4,BA,EB,AF
; " (ENTER 1 TO 5) "
DF8E 7E EB AE 11 LDF8E DB >7E,EB,AE,11,05,84,52,E8,6E,59,1B,A5,BA,EB,AF
; " (ENTER 1 TO 7) "
DF9D 7E EB AE 11 LDF9D DB >7E,EB,AE,11,05,84,52,E8,6E,59,1B,A7,BA,EB,AF
; " (ENTER 1 TO 8) "
DFAC 7E EB AE 11 LDFAC DB >7E,EB,AE,11,05,84,52,E8,6E,59,1B,A8,BA,EB,AF
; " AUDIO MODE IS "
DFBB BA EB 80 SC LDFBB DB >BA,EB,80,5C,32,11,B8,C4,43,12,E2,15,BA,EB,AE

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DFCA 7E EB 92 50 : "( PRESS '1' FOR )"
LDFCA DB >7E,EB,92,50,45,55,BA,C8,6C,B8,54,54,BA,EB,AF
: " ALTERNATE "
LDFD9 BA EB AE BB LDFD9 DB >BA,EB,AE,B8,02,D6,11,44,00,58,4B,AE,BA,EB,AE
: " PRIMARY "
LDFE8 BA EB AE BA LDFE8 DB >BA,EB,AE,BA,E4,94,20,C0,14,6E,EB,AE,BA,EB,AE
: " ALTERNATE "
LDFF7 7E EB AE BB LDFF7 DB >7E,EB,AE,B8,02,D6,11,44,00,58,4B,AE,BA,EB,AF
: " PRIMARY "
E006 7E EB AE BA LE006 DB >7E,EB,AE,BA,E4,94,20,C0,14,6E,EB,AE,BA,EB,AF
: " MESSAGE PROMPT IS "
LE015 B8 C1 15 54 LE015 DB >B8,C1,15,54,01,84,BA,E4,94,44,C4,96,B8,85,6E
: " ( PRESS '2' TO )"
E024 7E EB AE 49 LE024 DB >7E,EB,AE,49,41,15,56,EB,22,B2,E5,91,BA,EB,AF
: " ENABLED "
LE033 BA EB AE BA LE033 DB >BA,EB,AE,BA,E1,10,00,12,C4,0E,EB,AE,BA,EB,AE
: " DISABLED "
LE042 BA EB AE BA LE042 DB >BA,EB,AE,BA,E0,C8,54,00,4B,10,3B,AE,BA,EB,AE
: " ( ENABLE )"
LE051 7E EB AE BA LE051 DB >7E,EB,AE,BA,EB,84,40,00,4B,12,EB,AE,BA,EB,AF
: " ( DISABLE )"
LE060 7E EB AE BA LE060 DB >7E,EB,AE,BA,E0,C8,54,00,4B,12,EB,AE,BA,EB,AF
: " ENTER THE OLD "
LE06F BA EB 84 41 LE06F DB >BA,EB,84,41,61,14,B9,61,C4,B9,12,C3,BA,EB,AE
: " ENTER THE OLD "
LE07E BA EB 84 41 LE07E DB >BA,EB,84,41,61,14,BA,E5,87,12,E4,4B,0E,EB,AE
: " ENTER A NEW "
LE08D BA EB AE 11 LE08D DB >BA,EB,AE,11,05,84,52,E0,2E,40,46,6E,BA,EB,AE
: " REENTER THE NEW "
LE09C BA E5 04 11 LE09C DB >BA,E5,04,11,05,84,52,EB,96,1C,4B,90,11,9B,AE
: " 0-8 DIGITS "
LEOAB BA EB AE BA LEOAB DB >BA,EB,AE,BA,0D,68,B8,32,06,21,65,6E,BA,EB,AE
: " 1-8 DIGITS "
LEOBA BA EB AE BA LEOBA DB >BA,EB,AE,BA,1D,68,B8,32,06,21,65,6E,BA,EB,AE
: " PLUS 'ENTER' "
LEOC9 BA EB AE 48 LEOC9 DB >BA,EB,AE,48,B5,D5,BA,C1,10,58,45,2C,BA,EB,AE
: " FOR VERIFICATION "
LEOD8 BA E1 51 52 LEOD8 DB >BA,E1,51,52,E6,04,50,81,48,08,05,88,45,0B,AE
: " HAS BEEN CHANGED "
LEOE7 BA E1 C0 56 LEOE7 DB >BA,E1,C0,56,E0,44,11,0B,82,1C,04,06,10,3B,AE
: " THE NEW PASSWORDS "
LEOF6 B9 61 C4 B9 LEOF6 DB >B9,61,C4,B9,01,19,B9,20,15,55,94,54,0D,5B,AE
: " WERE DIFFERENT. "
LE105 BA E6 44 50 LE105 DB >BA,E6,44,50,4B,83,20,51,44,50,44,16,76,EB,AE
: " PASSWORD NOT CHANGED "
LE114 48 05 55 65 LE114 DB >48,05,55,65,15,03,B9,04,56,B8,21,C0,40,61,03
: " ( PAGE: )"
LE123 7E E4 80 18 LE123 DB >7E,E4,80,18,47,6E,BA,EB,AE,BA,EB,AE
: " ( NUMBER TOO LARGE )"
LE132 7E E4 17 30 LE132 DB >7E,E4,17,30,11,14,B9,64,51,B8,B0,14,18,4B,AF
: " ( NO MESSAGES )"
LE141 7E EB AE 41 LE141 DB >7E,EB,AE,41,1B,AE,30,45,55,00,61,15,BA,EB,AF
: " ( NO NEWER MESSAGE )"
LE150 7E E4 11 B9 LE150 DB >7E,E4,11,B9,01,19,11,4B,8C,11,55,40,18,4B,AF
: " ( NO OLDER MESSAGE )"
LE15F 7E E4 11 B9 LE15F DB >7E,E4,11,B9,12,C3,11,4B,8C,11,55,40,18,4B,AF
: " ( < OR > )"
LE16E 7E EB AE BA LE16E DB >7E,EB,AE,BA,EC,AE,B9,15,2E,BB,3B,AE,BA,EB,AF
: " ( <, >, PAGE NUMBER )"
LE17D 7E EC BD BB LE17D DB >7E,EC,BD,BB,3F,6E,48,01,84,B9,05,CC,04,45,2F

```

; "(ENTER THE RATING)"
E18C 7E E1 10 58 LE18C DB >7E,E1,10,58,45,2E,58,71,2E,50,05,88,40,6B,AF
; "(PASSWORD:)"
E19B 7D 20 15 55 LE19B DB >7D,20,15,55,94,54,0D,DB,AE,BA,EB,AE,BA,EB,AF
; "(ENTER THE PURCHASE)"
E1AA 7C 44 16 11 LE1AA DB >7C,44,16,11,4B,96,1C,4B,92,5D,40,87,01,51,2F
; "(WRONG PASSWORD)"
E1B9 7E EB 99 51 LE1B9 DB >7E,EB,99,51,14,06,B9,20,15,55,94,54,0E,EB,AF
; "(NO OLDER HISTORY)"
E1C8 7E E4 11 B9 LE1C8 DB >7E,E4,11,B9,12,C3,11,4B,87,21,55,91,51,BB,AF
; "(NO NEWER HISTORY)"
E1D7 7E E4 11 B9 LE1D7 DB >7E,E4,11,B9,01,19,11,4B,87,21,55,91,51,BB,AF
; "(NO PURCHASES)"
E1E6 7E EB AE 41 LE1E6 DB >7E,EB,AE,41,1B,92,5D,40,87,01,51,15,BA,EB,AF
; "(NO OLDER REPORT)"
E1F5 7E E4 11 B9 LE1F5 DB >7E,E4,11,B9,12,C3,11,4B,94,11,24,54,5A,EB,AF
; "(NO NEWER REPORT)"
E204 7E E4 11 B9 LE204 DB >7E,E4,11,B9,01,19,11,4B,94,11,24,54,5A,EB,AF
; "(NOTHING TO REPORT)"
E213 7D 04 56 1C LE213 DB >7D,04,56,1C,84,06,B9,64,6E,50,44,91,51,6B,AF
; " DATA REPORT "
E222 BA EB AE 0C LE222 DB >BA,EB,AE,0C,05,80,BA,E5,04,49,15,16,BA,EB,AE
; " PURCHASE HISTORY "
E231 BA E4 97 50 DB >BA,E4,97,50,21,C0,54,4B,87,21,55,91,51,BB,AE
; " BLACKOUT IN EFFECT "
E240 B8 12 C0 08 LE240 DB >B8,12,C0,08,A4,57,5A,E2,10,B8,41,45,10,25,AE
; " ALTERNATE PROGRAM "
E24F B8 02 D6 11 LE24F DB >B8,02,D6,11,44,00,58,4B,AE,49,44,46,50,03,2E
; " ON CHANNEL "
E25E BA EB 91 42 DB >BA,EB,91,42,E0,87,01,04,04,2E,EB,AE,BA,EB,AE
; "FOR THE NEXT PROGRAM"
E26D 15 15 2E 58 LE26D DB >15,15,2E,58,71,2E,40,46,96,B9,25,11,19,40,0C
; " FOR THIS PROGRAM "
E27C BA E1 51 52 LE27C DB >BA,E1,51,52,E5,87,21,5B,92,51,11,94,00,CB,AE
; "* PREVIEW OF: *"
E28B DA EB AE B9 LE28B DB >DA,EB,AE,B9,25,04,60,81,19,B9,11,5D,BA,EB,B6
; "RATING CEILING: "
E29A 50 05 88 40 LE29A DB >50,05,88,40,6B,82,10,82,C8,40,67,6E,BA,EB,AE
; "PROGRAM RATING: "
E2A9 49 44 46 50 LE2A9 DB >49,44,46,50,03,2E,50,05,88,40,67,6E,BA,EB,AE
; "*PROGRAM LOCKED OUT*"
E2B8 D9 25 11 19 LE2B8 DB >D9,25,11,19,40,0C,B8,B4,42,28,40,EE,45,75,B6
; " PROGRAM LOCKED OUT "
E2C7 B9 25 11 19 LE2C7 DB >B9,25,11,19,40,0C,B8,B4,42,28,40,EE,45,75,AE
; "DUE TO RATING LEVEL"
E2D6 OD 71 2E 59 LE2D6 DB >OD,71,2E,59,1B,AE,50,05,88,40,6B,8B,11,81,0B
; "(<, >, OR 'ENTER')"
E2E5 7E EC BD BB LE2E5 DB >7E,EC,BD,BB,3E,6E,45,4B,AC,11,05,84,52,CB,AF
; "('ENTER')"
E2F4 7E EB AE BA LE2F4 DB >7E,EB,AE,BA,EB,04,41,61,14,B2,EB,AE,BA,EB,AF
; "(PRESS 'ENTER' TO)"
E303 7E E4 94 11 LE303 DB >7E,E4,94,11,55,6E,B0,44,16,11,4B,2E,59,1B,AF
; "(CONFIRM PURCHASE)"
E312 7E E0 91 40 LE312 DB >7E,E0,91,40,52,14,32,E4,97,50,21,C0,54,4B,AF
; "UNIT: "
E321 5D 02 16 76 LE321 DB >5D,02,16,76,EB,AE,BA,EB,AE,BA,EB,AE
; "SIGNAL LEVEL: "
E330 54 81 90 00 LE330 DB >54,81,90,00,BB,8B,11,81,0B,76,EB,AE,BA,EB,AE
; "SERVICE ID: "
E33F 54 45 18 20 LE33F DB >54,45,18,20,21,2E,20,37,6E,BA,EB,AE,BA,EB,AE

E34E	2D	10	80	58	; "LOCATION: "	LE34E DB >2D, 10, 80, 58, 84, 50, 76, EB, AE, BA, EB, AE, BA, EB, AE
E35D	54	45	AE	BA	; "SET "	LE35D DB >54, 45, AE, BA, EB, AE
E363	41	15	AE	54	; "NOT SET "	LE363 DB >41, 15, AE, 54, 45, AE
E369	41	14	04	; "NONE"	LE369 DB >41, 14, 04	
E36C	B9	01	04	0D	; "NEEDS AUTHORIZATION"	LE36C DB >B9, 01, 04, 0D, 5B, 80, 5D, 61, D1, 50, 87, 00, 58, 84, 50
E37B	76	EB	90	46	; "NO VIDEOCIPHER SIGNAL"	LE37B DB >76, EB, 90, 46, EB, AE, BA, E6, 08, 0C, 44, 42, 21, 21, C4
E38A	52	E5	48	19	; "DB >52, E5, 48, 19, 00, 0B	
E390	DF	BB	;	LE390 DW LDFBB ;" AUDIO MODE IS "		
E392	E8	A5	;	DW LE8A5 ;		
E394	DF	CA	;	DW LDFCA ;" (PRESS "1" FOR) "		
E396	E8	A5	;	DW LE8A5 ;		
E398	E8	A5	;	DW LE8A5 ;		
E39A	E0	15	;	DW LE015 ;" MESSAGE PROMPT IS "		
E39C	E8	A5	;	DW LE8A5 ;		
E39E	E0	24	;	DW LE024 ;" (PRESS "2" TO) "		
E3A0	E8	A5	;	DW LE8A5 ;		
E3A2	E0	6F	;	LE3A2 DW LE06F ;" ENTER THE OLD "		
E3A4	DE	8F	;	DW LDE8F ;" PURCHASE PASSWORD "		
E3A6	E8	A5	;	DW LE8A5 ;		
E3A8	E8	A5	;	DW LE8A5 ;		
E3AA	E8	A5	;	DW LE8A5 ;		
E3AC	E0	BA	;	DW LEOBA ;" 1-8 DIGITS "	"	
E3AE	E0	C9	;	DW LEOC9 ;" PLUS "ENTER" "	"	
E3B0	E8	A5	;	DW LE8A5 ;		
E3B2	E1	9B	;	DW LE19B ;" (PASSWORD:) "		
E3B4	E0	8D	;	LE3B4 DW LEO8D ;" ENTER A NEW "		
E3B6	DE	8F	;	DW LDE8F ;" PURCHASE PASSWORD "		
E3B8	E8	A5	;	DW LE8A5 ;		
E3BA	E8	A5	;	DW LE8A5 ;		
E3BC	E8	A5	;	DW LE8A5 ;		
E3BE	E0	AB	;	DW LEOAB ;" 0-8 DIGITS "	"	
E3C0	E0	C9	;	DW LEOC9 ;" PLUS "ENTER" "	"	
E3C2	E8	A5	;	DW LE8A5 ;		
E3C4	E1	9B	;	DW LE19B ;" (PASSWORD:) "		
E3C6	E0	7E	;	LE3C6 DW LE07E ;" ENTER THE OLD "		
E3C8	DE	80	;	DW LDE80 ;" PROGRAM RATING "	"	
E3CA	DE	AD	;	DW LDEAD ;" PASSWORD "	"	
E3CC	E8	A5	;	DW LE8A5 ;		
E3CE	E8	A5	;	DW LE8A5 ;		
E3D0	E0	BA	;	DW LEOBA ;" 1-8 DIGITS "	"	
E3D2	E0	C9	;	DW LEOC9 ;" PLUS "ENTER" "	"	
E3D4	E8	A5	;	DW LE8A5 ;		
E3D6	E1	9B	;	DW LE19B ;" (PASSWORD:) "		
E3D8	E0	8D	;	LE3D8 DW LEO8D ;" ENTER A NEW "		
E3DA	DE	80	;	DW LDE80 ;" PROGRAM RATING "	"	
E3DC	DE	AD	;	DW LDEAD ;" PASSWORD "	"	
E3DE	E8	A5	;	DW LE8A5 ;		
E3E0	E8	A5	;	DW LE8A5 ;		
E3E2	E0	AB	;	DW LEOAB ;" 0-8 DIGITS "	"	

E3E4 E0 C9 DW LEOC9 : " PLUS 'ENTER' " 1
E3E6 E8 A5 DW LE8A5 : 2
E3E8 E1 9B DW LE19B : "(PASSWORD:)" 3

E3EA E0 9C LE3EA DW LEO9C : " REENTER THE OLD " 4
E3EC DE AD DW LDEAD : " PASSWORD " 5

E3EE E0 D8 DW LE0D8 : " FOR VERIFICATION " 6
E3FO E8 A5 DW LE8A5 : 7
E3F2 E8 A5 DW LE8A5 : 8
E3F4 E0 AB DW LEOAB : " 0-8 DIGITS " 9
E3F6 E0 C9 DW LEOC9 : " PLUS 'ENTER' " 10
E3F8 E8 A5 DW LE8A5 : 11
E3FA E1 9B DW LE19B : "(PASSWORD:)" 12

E3FC E8 A5 LE3FC DW LE8A5 : 13

E3FE E8 A5 DW LE8A5 : 14
E400 E8 A5 DW LE8A5 : 15
E402 DE 80 DW LDE80 : " PROGRAM RATING " 16
E404 DE AD DW LDEAD : " PASSWORD " 17
E406 E0 E7 DW LEOE7 : " HAS BEEN CHANGED " 18
E408 E8 A5 DW LE8A5 : 19
E40A E8 A5 DW LE8A5 : 20
E40C E8 A5 DW LE8A5 : 21

E40E E8 A5 LE40E DW LE8A5 : 22
E410 E8 A5 DW LE8A5 : 23
E412 E8 A5 DW LE8A5 : 24
E414 DE 9E DW LDE9E : " PURCHASE PASSWORD " 25
E416 E0 E7 DW LEOE7 : " HAS BEEN CHANGED " 26
E418 E8 A5 DW LE8A5 : 27
E41A E8 A5 DW LE8A5 : 28
E41C E8 A5 DW LE8A5 : 29
E41E E8 A5 DW LE8A5 : 30

E420 E8 A5 LE420 DW LE8A5 : 31
E422 E8 A5 DW LE8A5 : 32
E424 E8 A5 DW LE8A5 : 33
E426 E0 F6 DW LEOF6 : " THE NEW PASSWORDS " 34
E428 E1 05 DW LE105 : " WERE DIFFERENT. " 35
E42A E1 14 DW LE114 : "PASSWORD NOT CHANGED" 36
E42C E8 A5 DW LE8A5 : 37
E42E E8 A5 DW LE8A5 : 38
E430 E8 A5 DW LE8A5 : 39

E432 E8 A5 LE432 DW LE8A5 : 40
E434 DE 62 DW LDE62 : "CREDIT: " 41
E436 E8 A5 DW LE8A5 : 42
E438 E8 A5 DW LE8A5 : 43
E43A DE 71 DW LDE71 : "CREDIT VERIFICATION:" 44
E43C E8 A5 DW LE8A5 : 45
E43E E8 A5 DW LE8A5 : 46
E440 E8 A5 DW LE8A5 : 47
E442 E8 A5 DW LE8A5 : 48

E444 E8 A5 LE444 DW LE8A5 : 49
E446 E8 A5 DW LE8A5 : 50
E448 E8 A5 DW LE8A5 : 51
E44A E8 A5 DW LE8A5 : 52
E44C E8 A5 DW LE8A5 : 53

14112 G.B.

E44E E8 A5 DW LE8A5 ;
E450 E8 A5 DW LE8A5 ;
E452 E3 03 DW LE303 ; "(PRESS 'ENTER' TO)"
E454 E3 12 DW LE312 ; "(CONFIRM PURCHASE)"
;
E456 E2 9A LE456 DW LE29A ; "RATING CEILING: " "
E458 E8 A5 DW LE8A5 ;
E45A E8 A5 DW LE8A5 ;
E45C E8 A5 DW LE8A5 ;
E45E E8 A5 DW LE8A5 ;
E460 E8 A5 DW LE8A5 ;
E462 E8 A5 DW LE8A5 ;
E464 E8 A5 DW LE8A5 ;
;
E466 E8 A5 DW LE8A5 ;
;
E468 E2 22 LE468 DW LE222 ; " DATA REPORT " "
E46A E8 A5 DW LE8A5 ;
E46C E8 A5 DW LE8A5 ;
E46E E8 A5 DW LE8A5 ;
E470 E8 A5 DW LE8A5 ;
E472 E8 A5 DW LE8A5 ;
E474 E8 A5 DW LE8A5 ;
E476 E8 A5 DW LE8A5 ;
;
E478 E3 21 LE478 DW LE321 ; "UNIT: " "
E47A E8 A5 DW LE8A5 ;
E47C E3 30 DW LE330 ; "SIGNAL LEVEL: " "
E47E E8 A5 DW LE8A5 ;
E480 E3 3F DW LE33F ; "SERVICE ID: " "
E482 E8 A5 DW LE8A5 ;
E484 E3 4E DW LE34E ; "LOCATION: " "
E486 E8 A5 DW LE8A5 ;
E488 E8 A5 DW LE8A5 ;
;
;
;" RESETS "
E48A BA EB 94 11 LE48A DB >BA,EB,94,11,51,16,56,EB,AE,BA,EB,AE,BA,EB,AE
;(LE492)
;" WORST IDLE (0)..(3):"
E499 65 15 15 5A LE499 DB >65,15,15,5A,E2,03,2C,4B,9F,82,FB,6D,7E,3B,DD
;" MSGS REC'D "
E4A8 BA EB AE BA LE4A8 DB >BA,EB,AE,BA,EB,8C,54,65,6E,50,40,AC,0E,EB,AE
;" MSGS DROPPED "
E4B7 BA EB AE B8 LE4B7 DB >BA,EB,AE,B8,C5,46,56,E0,D4,45,24,84,0E,EB,AE
;
E4C6 E4 8A DW LE48A ; " RESETS " "
E4C8 E8 A5 DW LE8A5 ;
E4CA E4 99 DW LE499 ; "WORST IDLE (0)..(3):"
E4CC E8 A5 DW LE8A5 ;
E4CE E8 A5 DW LE8A5 ;
E4D0 E8 A5 DW LE8A5 ;
E4D2 E4 A8 DW LE4A8 ; " MSGS REC'D " "
E4D4 E8 A5 DW LE8A5 ;
E4D6 E4 B7 DW LE4B7 ; " MSGS DROPPED " "
;
;
E4D8 19232322 LE4D8 DB >19,23,23,22,23,23,1E,28

E4EO 281E1E23

DB >28, 1E, 1E, 23, 23, 1E, 28, 1E

E4E8	BA	EB	AE	BA	LE4E8 DB >BA, EB, AE, BA, EB, AE, BA, EB, AE, BA, EB, AE, BA, EB, AE
E4F7	BA	EB	AE	BA	DB >BA, EB, AE, BA, EB, AE, BA, EB, AE, BA, EB, AE, BA, EB, AE
E506	50	41	44	52	DB >50, 41, 44, 52, E5, 91, B9, 61, C4, B9, 75, 44, 52, C5, 6E
E515	30	04	17	00	DB >30, 04, 17, 00, BB, 94, 46, E2, 10, 58, 45, 12, 50, 45, AE
E524	21	05	56	00	DB >21, 05, 56, 00, B2, C0, 58, 84, 50, B9, 80, OB, 5C, 45, 6D
					:
					;"
					;" ENTER A DIGIT TO "
					;" EXAMINE STORED "
					;" INFORMATION, OR TO "
					;" CHANGE THE WAY THE "
					;" VIDEOCIPHER UNIT "
					;" OPERATES.
					:
E533	BA	EB	AE	BA	LE533 DB >BA, EB, AE, BA, EB, AE, BA, EB, AE, BA, EB, AE
E542	BA	E1	10	58	DB >BA, E1, 10, 58, 45, 2E, 02, E0, C8, 18, 85, AE, 59, 1B, AE
E551	BA	EB	84	68	DB >BA, EB, 84, 68, 03, 08, 40, 4B, 95, 59, 15, 04, 0E, EB, AE
E560	B8	84	05	45	DB >B8, 84, 05, 45, 43, 00, 58, 84, 50, F6, E4, 54, B9, 64, 6E
E56F	B8	21	C0	40	DB >B8, 21, C0, 40, 61, 2E, 58, 71, 2E, 64, 06, EE, 58, 71, 2E
E57E	BA	E6	08	0C	DB >BA, E6, 08, 0C, 44, 42, 21, 21, C4, 52, E5, D0, 21, 6B, AE
E58D	BA	EB	AE	BA	DB >BA, EB, AE, BA, E4, 52, 11, 40, 16, 11, 5B, 6E, BA, EB, AE
					:
					;"
					;" MESSAGE' DISPLAYS "
					;" THE OLDEST UNSEEN "
					;" MESSAGE. USE '>' "
					;" FOR THE NEXT MESSAGE"
					;" OR '<' FOR THE "
					;" PREVIOUS ONE.
					:
E59C	BA	EB	AE	BA	LE59C DB >BA, EB, AE, BA, EB, AE, BA, EB, AE, BA, EB, AE
E5AB	BA	C3	04	55	DB >BA, C3, 04, 55, 50, 06, 12, CB, 83, 21, 54, 8B, 01, B5, 6E
E5BA	BA	E5	87	12	DB >BA, E5, 87, 12, E4, 4B, 0C, 45, 56, B9, 74, 15, 10, 44, 2E
E5C9	B8	C1	15	54	DB >B8, C1, 15, 54, 01, 84, B6, EB, AE, 5D, 51, 2E, B3, 3B, 2E
E5D8	15	15	2E	58	DB >15, 15, 2E, 58, 71, 2E, 40, 46, 96, B8, C1, 15, 54, 01, 84
E5E7	BA	EB	91	52	DB >BA, EB, 91, 52, EB, 32, B2, E1, 51, 52, E5, 87, 12, EB, AE
E5F6	BA	EB	92	50	DB >BA, EB, 92, 50, 46, 08, 45, 75, 6E, 45, 01, 2D, BA, EB, AE
					:
					;" USE 'NEXT PRG' TO "
					;" BUY A PROGRAM BEFORE "
					;" IT BEGINS. CANCEL "
					;" THE PREPURCHASE BY "
					;" CHANGING THE CHANNEL "
					;" BEFORE THE PROGRAM "
					;" BEGINS. "
					:
E605	B9	75	44	BA	LE605 DB >B9, 75, 44, BA, EB, 10, 11, A5, AE, 49, 41, AC, B9, 64, 6E
E614	05	76	EE	02	DB >05, 76, EE, 02, E4, 94, 44, 65, 00, 32, E0, 44, 15, 15, 04
E623	21	6B	81	10	DB >21, 6B, 81, 10, 62, 10, 56, DB, AE, B8, 20, 10, 08, 42, EE
E632	B9	61	C4	B9	DB >B9, 61, C4, B9, 25, 04, 49, 75, 02, 1C, 05, 44, B8, 16, EE
E641	08	70	10	18	DB >08, 70, 10, 18, 84, 06, B9, 61, C4, B8, 21, C0, 41, 01, 0B
E650	B8	11	05	45	DB >B8, 11, 05, 45, 41, 2E, 58, 71, 2E, 49, 44, 46, 50, 03, 2E

E65F BA EB AE BA

DB >BA,EB,AE,BA,EB,95,58,05,16,56,DB,AE

: "ENTER THE REQUESTED"
: "PASSWORD AND PRESS "
: "THE 'ENTER' KEY."
:
: "USE THE 'CANCEL' KEY"
: "TO DELETE WRONG "
: "DIGITS."

E66B 11 05 84 52
E67A B9 20 15 55

LE66B DB >11,05,84,52,E5,87,12,EB,94,11,35,C4,55,61,03
DB >B9,20,15,55,94,54,OE,E0,10,0E,E4,94,11,55,6E

E689 BA E5 87 12

DB >BA,E5,87,12,EB,04,41,61,14,B2,E2,84,6E,DB,AE

E698 BA EB AE BA

DB >BA,EB,AE,BA,EB,AE,BA,EB,AE,BA,EB,AE,BA,EB,AE

E6A7 SD 51 2E 58

DB >SD,51,2E,58,71,2E,B0,20,10,08,42,EC,B8,A1,1B

E6B6 BA E5 91 B8

DB >BA,E5,91,B8,31,OB,11,61,2E,B9,95,11,40,6B,AE

E6C5 BA EB AE BA

DB >BA,EB,AE,BA,EB,83,20,62,16,56,DB,AE,BA,EB,AE

: " ENTER A 3-DIGIT "
: "NUMBER TO FIND THAT"
: "PAGE. ENTER '>' FOR"
: "THE NEXT PAGE OR '<'"
: " FOR THE LAST PAGE."
: " USE 'CANCEL' TO "
: " STOP A PAGE SEARCH."

E6D4 BA E1 10 58

LE6D4 DB >BA,E1,10,58,45,2E,02,EB,A3,D4,32,06,21,6B,AE

E6E3 41 73 01 11

DB >41,73,01,11,4B,AE,59,1B,85,21,00,EE,58,70,16

E6F2 48 01 84 B6

DB >48,01,84,B6,EB,84,41,61,14,BA,CC,EC,B8,54,54

E701 58 71 2E 40

DB >58,71,2E,40,46,96,B9,20,06,12,E4,54,BA,CC,AC

E710 B8 54 54 B9

DB >B8,54,54,B9,61,C4,B8,B0,15,5A,E4,80,18,4B,6E

E71F BA EB 97 54

DB >BA,EB,97,54,4B,AC,08,04,02,10,BB,2E,59,1B,AE

E72E B9 55 91 4A

DB >B9,55,91,4A,E0,2E,48,01,84,B9,51,00,50,21,ED

: "
: " FOLLOW THE MENUS AS"
: "PROMPTED IN ORDER TO"
: " CHANGE THE RATING "
: " CEILING, OR TO "
: " PURCHASE AN EVENT."

E73D BA EB AE BA

LE73D DB >BA,EB,AE,BA,EB,AE,BA,EB,AE,BA,EB,AE

E74C 15 12 CB 45

DB >15,12,CB,45,9B,AE,58,71,2E,30,44,17,56,E0,15

E75B 49 44 4C 49

DB >49,44,4C,49,61,03,B8,84,2E,45,40,C4,52,E5,91

E76A B8 21 CO 40

DB >B8,21,CO,40,61,2E,B9,61,C4,B9,40,16,21,01,AE

E779 BA EB 82 10

DB >BA,EB,82,10,82,C8,40,6E,45,4B,96,46,EB,AE

E788 B9 25 D4 08

DB >B9,25,D4,08,70,15,12,E0,10,B8,46,04,41,6B,6E

: "
: " PURCHASE HISTORY "
: " IS THE DATE, TIME, "
: " COST AND NAME OF "
: " THE PREVIOUS 14 "
: " PURCHASED PROGRAMS."
: " USE '>' FOR NEWER"
: " ENTRIES, OR '<>' FOR"
: " OLDER ONES."

E797 BA E4 97 50

LE797 DB >BA,E4,97,50,21,CO,54,4B,87,21,55,91,51,BB,AE

E7A6 B8 85 6E 58

DB >B8,85,6E,58,71,2E,0C,05,84,F4,E5,88,30,4F,6E

E7B5 BA E0 91 55

DB >BA,E0,91,55,6B,80,40,33,D0,00,C1,2E,44,5B,AE

1 E7C4 BA E5 87 12 DB >BA, E5, 87, 12, E4, 94, 11, 82, 11, 5D, 5B, AE, 86, 4B, AE
 2 E7D3 49 75 02 1C DB >49, 75, 02, 1C, 05, 44, 0E, EB, 92, 51, 11, 94, 00, C5, 6D
 3 E7E2 BA EB 97 54 DB >BA, EB, 97, 54, 4B, AC, CE, CB, 85, 45, 4B, 90, 11, 91, 14
 4 E7F1 B8 44 16 50 DB >B8, 44, 16, 50, 81, 15, F6, E4, 54, BA, CC, AC, B8, 54, 54
 5 E800 BA EB AE B9 DB >BA, EB, AE, B9, 12, C3, 11, 4B, 91, 40, 45, 6D, BA, EB, AE
 6 : "THE VIDEOCIPHER KEYS"
 7 : "(VIEW, HELP, SETUP, "
 8 : "NEXT PRG, MESSAGE, "
 9 : "TEXT, < AND >) WORK"
 10 : "ONLY WHEN THE "
 11 : "VIDEOCIPHER LIGHT IS"
 12 : "ON. USE THE 'VIEW' "
 13 : "KEY TO SEE TV. "
 14 :
 15 E80F 58 71 2E 60 LE80F DB >58, 71, 2E, 60, 80, C4, 44, 22, 12, 1C, 45, 2E, 28, 46, D5
 16 E81E 7E E6 08 11 DB >7E, E6, 08, 11, 9F, 6E, 1C, 42, D2, F6, E5, 44, 59, 74, BD
 17 E82D B9 01 1A 5A DB >B9, 01, 1A, 5A, E4, 94, 1B, DB, 8C, 11, 55, 40, 18, 4F, 6E
 18 E83C 58 46 96 F6 DB >58, 46, 96, F6, EC, AE, 01, 00, EE, CE, EB, EE, 65, 15, 0A
 19 E84B BA EB 91 40 DB >BA, EB, 91, 40, B6, EE, 64, 71, 10, B9, 61, C4, BA, EB, AE
 20 E85A 60 80 C4 44 DB >60, 80, C4, 44, 22, 12, 1C, 45, 2E, 2C, 81, 87, 5A, E2, 15
 21 E869 B9 14 2D B9 DB >B9, 14, 2D, B9, 75, 44, B9, 61, C4, BA, C6, 08, 11, 9B, 2E
 22 E878 BA EB 8A 11 DB >BA, EB, 8A, 11, BB, 96, 46, E5, 44, 12, E5, 98, B6, EB, AE
 23 :
 24 : "USE 'ENTER' TO "
 25 : "MAKE THE PURCHASE."
 26 E887 BA EB 97 54 LE887 DB >BA, EB, 97, 54, 4B, AC, 11, 05, 84, 52, CB, 96, 46, EB, AE
 27 E896 B8 C0 OA 12 DB >B8, C0, OA, 12, E5, 87, 12, E4, 97, 50, 21, C0, 54, 4B, 6E
 28 :
 29 : "USE 'CANCEL' OR "
 30 : "'VIEW' TO EXIT "
 31 : "WITHOUT PURCHASE. "
 32 :
 33 E8A5 BA EB AE BA LE8A5 DB >BA, EB, AE, BA, EB, AE, BA, EB, AE, BA, EB, AE
 34 E8B4 BA E5 D5 12 DB >BA, E5, D5, 12, EB, 02, 01, 00, 84, 2E, CB, AE, 45, 4B, AE
 35 E8C3 BA EB AC 60 DB >BA, EB, AC, 60, 81, 19, B2, E5, 91, B8, 46, 88, 5A, EB, AE
 36 E8D2 BA E6 48 58 DB >BA, E6, 48, 58, 74, 57, 5A, E4, 97, 50, 21, C0, 54, 4B, 6E
 37 :
 38 : "USE '>' TO RAISE "
 39 : "THE RATING CEILING "
 40 : "OR '<' TO LOWER IT."
 41 : "USE 'ENTER' TO "
 42 : "CONTINUE. "
 43 E8E1 BA EB AE BA LE8E1 DB >BA, EB, AE, BA, EB, AE, BA, EB, AE, BA, EB, AE
 44 E8F0 BA E5 D5 12 DB >BA, E5, D5, 12, EB, 33, B2, E5, 91, B9, 40, 08, 54, 4B, AE
 45 E8FF B9 61 C4 B9 DB >B9, 61, C4, B9, 40, 16, 21, 01, AE, 08, 42, OB, 21, 01, AE
 46 E90E B9 15 2E B3 DB >B9, 15, 2E, B3, 2B, 2E, 59, 1B, OB, 45, 91, 14, B8, 85, AD
 47 E91D BA EB 97 54 DB >BA, EB, 97, 54, 4B, AC, 11, 05, 84, 52, CB, 96, 46, EB, AE
 48 E92C BA EB AE B8 DB >BA, EB, AE, B8, 24, 50, 58, 84, 17, 12, DB, AE, BA, EB, AE
 49 :
 50 : "AUDIO MODE SELECTS "
 51 : "EITHER THE PRIMARY "
 52 : "OR THE ALTERNATE "
 53 : "PROGRAM WHEN TWO "
 54 : "AUDIO PROGRAMS ARE "
 55 : "BEING BROADCAST. "
 56 :
 57 E93B BA EB AE BA LE93B DB >BA, EB, AE, BA, EB, AE, BA, EB, AE, BA, EB, AE

E959 B8 42 16 1C DB >B8,42,16,1C,45,2E,58,71,2E,49,42,0C,01,46,EE
E968 BA E4 54 B9 DB >BA,E4,54,B9,61,C4,B8,02,D6,11,44,00,58,4B,AE
E977 BA E4 94 44 DB >BA,E4,94,44,65,00,32,E6,47,11,0B,96,65,1B,AE
E986 B8 05 C3 21 DB >B8,05,C3,21,1B,92,51,11,94,00,C5,6E,01,41,2E
E995 BA EO 44 21 DB >BA,EO,44,21,01,AE,05,44,40,0C,20,15,5A,DB,AE

: "CREDIT IS THE DOLLAR"
: "AMOUNT AVAILABLE FOR"
: " MAKING PURCHASES. "
: "
: "CREDIT VERIFICATION"
: " IS YOUR PROTECTED "
: " ACCOUNT BALANCE. "
:

E9A4 09 41 03 21 LE9A4 DB >09,41,03,21,6B,88,56,E5,87,12,E0,D1,2C,B0,14
E9B3 00 C4 57 41 DB >00,C4,57,41,6B,80,60,02,0B,00,12,C4,B8,54,54
E9C2 BA E3 00 28 DB >BA,E3,00,28,84,06,B9,25,D4,08,70,15,11,5B,6E
E9D1 BA EB AE BA DB >BA,EB,AE,BA,EB,AE,BA,EB,AE,BA,EB,AE
E9E0 09 41 03 21 DB >09,41,03,21,6B,AE,60,45,08,14,80,80,58,84,50
E9EF B8 85 6E 60 DB >B8,85,6E,6D,15,D4,BA,E4,94,45,61,02,58,40,EE
E9FE BA EO 02 09 DB >BA,EO,02,09,15,D0,5A,EO,40,2C,04,02,12,DB,AE

: "
: "A BLINKING * APPEARS"
: " ON THE SCREEN TO "
: " INDICATE AN UNREAD "
: "MESSAGE IF PROMPTING"
: " IS ENABLED. "
:

EA0D BA EB AE BA LEA0D DR >BA,EB,AE,BA,EB,AE,BA,EB,AE,BA,EB,AE
EA1C 02 EO 4B 21 DB >02,EO,4B,21,02,88,40,6B,B6,B8,04,92,10,05,15
EA2B BA E4 50 B9 DB >BA,E4,50,B9,61,C4,B9,50,94,10,44,2E,59,1B,AE
EA3A B8 84 03 20 DB >B8,84,03,20,20,16,12,E0,10,B7,74,14,10,00,EE
EA49 30 45 55 00 DB >30,45,55,00,61,2E,20,5B,92,51,13,12,58,84,06
EA58 BA EB AE B8 DB >BA,EB,AE,B8,85,6E,11,00,01,2C,40,ED,BA,EB,AE

: " USE 'ENTER' IF NO "
: "PASSWORD IS DESIRED."
: " ENTER FROM A TO Z "

1 : " DIGITS FOLLOWED BY "
2 : " 'ENTER' FOR A NEW "
3 : " PASSWORD. "
4 : " USE 'CANCEL' TO "
5 : "DELETE WRONG DIGITS."
6

EA67	B9	75	44	BA	LEA67 DB >B9,75,44,BA,C1,10,58,45,2C,BA,E2,05,B9,04,6E
EA76	48	05	55	65	DB >48,05,55,65,15,03,B8,85,6E,0C,45,48,50,40,ED
EA85	B8	44	16	11	DB >B8,44,16,11,4B,85,51,13,2E,BA,1B,96,46,EA,2E
EA94	B8	32	06	21	DB >B8,32,06,21,65,6E,15,12,CB,45,91,03,B8,16,EE
EAA3	BA	C1	10	58	DB >BA,C1,10,58,45,2C,B8,54,54,BA,E0,2E,40,46,6E
EAB2	BA	EB	AE	BA	DB >BA,EB,AE,BA,E4,80,55,56,51,50,3B,6E,BA,EB,AE
EAC1	BA	E5	D5	12	DB >BA,E5,D5,12,EB,AC,08,04,02,10,BB,2E,59,1B,AE
EAD0	0C	42	C4	58	DB >0C,42,C4,58,4B,99,51,14,06,B8,32,06,21,65,6D

10 :
11 :
12 : " IDENTIFY VIEWING "
13 : "REPORT LINES BY THE"
14 : " TWO-DIGIT NUMBER "
15 : " AT THE BEGINNING "
16 : " OF EACH LINE. "

14112 G.B.
EADF BA EB AE BA LEADIF DB >BA, EB, AE, BA, EB, AE, BA, EB, AE, BA, EB, AE
EAEE BA E2 03 11 DB >BA, E2, 03, 11, 05, 88, 15, BB, 98, 20, 46, 48, 40, 6B, AE
EAFD 50 44 91 51 DB >50, 44, 91, 51, 6B, AE, 2C, 84, 04, 56, E0, 5B, B9, 61, C4
EB0C BA E5 99 47 DB >BA, E5, 99, 47, 50, C8, 18, 85, AE, 41, 73, 01, 11, 4B, AE
EB1B BA E0 16 B9 DB >BA, E0, 16, B9, 61, C4, BB, 11, 06, 21, 04, 08, 40, 6B, AE
EB2A BA EB AE 44 DB >BA, EB, AE, 44, 5B, 84, 00, 21, EE, 2C, 84, 04, B6, EB, AE

EB39 7E EB AE BA ; " ('HELP')"
LEB39 DB >7E, EB, AE, BA, EB, AC, 1C, 42, D2, B2, EB, AE, BA, EB, AF
EB48 B9 62 OC 12 ; " TIME LEFT:)"
LEB48 DB >B9, 62, OC, 12, E2, C4, 15, 67, 6E, BA, EB, AE, BA, EB, AE
EB57 B9 55 80 51 ; " STARTS IN: "
LEB57 DB >B9, 55, 80, 51, 65, 6E, 21, 07, 6E, BA, EB, AE, BA, EB, AE
EB66 EB AE BA EB DB >EB, AE, BA, EB, AE, FF

F000 ORG >F000
F000 62 2B 64 LF000 DB >62, 2B, 64 ; "V2.4"
DB 'COPYRIGHT 1984/1985 M/A-COM LINKABIT CORP'

F003 43 4F 50 59 DB >43, 4F, 50, 59, 52, 49, 47, 48, 54, 20
F00D 31 39 38 34 DB >31, 39, 38, 34, 2F, 31, 39, 38, 35, 20
F017 4D 2F 41 2D DB >4D, 2F, 41, 2D, 43, 4F, 4D, 20, 4C, 49
F021 4E 4B 41 42 DB >4E, 4B, 41, 42, 49, 54, 20, 43, 4F, 52, 50

TRAP 6
IS TAKEN CARE
OF HERE.

F02C 72 FF 03 LF02C MOV ZFF, R3 ;
F02F A7 10 04 06 LF02F BTJZP Z10, APORT, LF039 ;Port A Data
F033 DA 03 F9 DJNZ R3, LF02F ;Wait for U7P31 to go low
F036 8C F1 38 LF036 BR @F138 ;TRAP 14
F039 8B 20 00 LF039 STA @2000 ;DED data port
F03C A4 01 06 ORP Z01, BPORT ;Set B0 - U7P7 DED high
F03F 72 FF 03 MOV ZFF, R3
F042 A6 10 04 05 LF042 BTJOP Z10, APORT, LF04B ;Port A Data
F046 DA 03 F9 DJNZ R3, LF042 ;Wait for U7P31 to go high
F049 E0 EB JMP LF036 ;Timeout
F04B A3 FE 06 LF04B ANDP ZFE, BPORT ;Set B0 - U7P7 DED low
F04E 0A RETS

TRAP 11
U7 B PORT OR U5 DATA READ INTO REGISTER A.
F04F 72 FF 03 LF04F MOV ZFF, R3 ;
F052 A7 10 04 05 LF052 BTJZP Z10, APORT, LF05B ;Port A Data
F056 DA 03 F9 DJNZ R3, LF052 ;Wait for U7P31 to go low
F059 E0 DB JMP LF036 ;Timeout

```

F05B A4 01 06      LF05B ORP %01,BPORT ;Set B0 - U7P7 DED high
F05E 72 FF 03      MOV %FF,R3
F061 A6 10 04 05    LF061 BTJOP %10,APORT,LF06A ;Port A Data
F065 DA 03 F9      DJNZ R3,LF061 ;Wait for U7P31 to go high
F068 EO CC          JMP LF036 ;Timeout
F06A 8A 40 00      LF06A LDA @4000 ;DED/U5 data port
F06D A3 FE 06      ANDF %FE,BPORT ;Set B0 - U7P7 DED low
F070 0A             RETS

; TRAP 7

F071 9A 35          LF071 LDA *R53 ;Start @R52..53
F073 8E F0 20        CALL @F02C ;Write A to DED
F076 D3 35          INC R53
F078 79 00 34        ADC %00,R52
F07B DA 10 F3        DJNZ R16,LF071 ;R16 bytes
F07E 0A             RETS

; TRAP 12

; # WRITE TO DISPLAY CHIP MEMORY

F07F A3 7F 04      LF07F ANDP %7F,APORT ;Select direct address mode
F082 B6              XCHB A ;Get address (B)
F083 8B 20 00        STA @2000 ;U6 data port
F086 B6              XCHB A ;Get data (A)
F087 8E F0 8E        CALL @F08E ;Write A to display memory (TRAP 13)
F08A A4 80 04        ORP %80,APORT ;Select address increment mode
F08D 0A             RETS

; TRAP 13

; # REGISTER A-->DISPLAY CHIP DATA PORT.

F08E A4 02 06      LF08E ORP %02,BPORT ;Set B1 - U6P12 (LDI) high
F091 8B 20 00        STA @2000 ;U6 data port
F094 A3 FD 06        ANDP %FD,BPORT ;Set B1 - U6P12 (LDI) low
F097 0A             RETS

F098 23 0F          LF098 AND %0F,A ;Get low nibble
F09A 28 20          ADD %20,A ;Add >20
F09C 2D 2A          CMP %2A,A
F09E E7 02          JNC LFOA2 ;< >2A
F0A0 2A 2A          SUB %2A,A ;Sub >2A
F0A2 0A             LFOA2 RETS

; TRAP 15

F0A3 C0              LF0A3 MOV A,B ;Save low nibble
F0A4 B7              SWAP A ;Get high nibble
F0A5 8E F0 98        CALL @F098 ;A = 20-29,00-05
F0A8 F2              TRAP 13 ;Write A to display memory
F0A9 62              MOV B,A ;Get low nibble
F0AA 8E F0 98        LFOAA CALL @F098 ;A = 20-29,00-05
F0AD F2              TRAP 13 ;Write A to display memory
F0AE 0A             RETS

; TRAP 16

```

```

1      ; ; ; START START START START START START
2      POWER ON INITIALIZATION
3      ;
4      ;
5      FOE3 06          LFOE3 DINT           trap 0
6      ;
7      ; Test register file
8      ;
9      FOE4 52 02        MOV %X02,B
10     FOE6 62          LFOE6 MOV B,A
11     FOE7 AB 00 00      STA @0000(B)
12     FOEA C3          INC B
13     FOEB E5 F9        JPZ LFOE6
14     FOED C2          LFOED DEC B
15     FOEE AA 00 00      LDA @0000(B)
16     FOF1 3D 00          CMP R0,B
17     FOF3 E6 3E        JNZ LF133 ; Register file error
18     FOF5 B4          INV A
19     FOF6 AB 00 00      STA @0000(B)
20     FOF9 5D 02        CMP %X02,B
21     FOFB E6 F0        JNZ LFOED
22     FOFD 62          LFOFD MOV B,A
23
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```

F0FE B4 INV A
 F0FF AD 00 00 CMPA @0000(B)
 F102 E6 2F JNZ LF133 ;Register file error
 F104 62 MOV B,A
 F105 AB 00 00 STA @0000(B)

F108 C3 INC B
 F109 E5 F2 JPZ LFOFD

;
 ; IOCNT0:
 ; Memory Mode : Full Expansion
 ; INT3 : Disabled (U24P26,U5P14)
 ; INT2 : Disabled (Not used)
 ; INT1 : Disabled (U24P1)

F10B A2 80 00 MOVP %80,IOCNT0 ;I/O Control Register 0

;
 ; Checksum ROM

F10E 88 00 00 37 MOVD %0000,R55 ;R54,R55=>0000
 F112 88 C0 02 35 MOVD %C002,R53 ;R52,R53=>C002
 F116 9A 35 LF116 LDA *R53
 F118 48 00 37 ADD R0,R55
 F11B 79 00 36 ADC %00,R54
 F11E D3 35 INC R53
 F120 79 00 34 ADC %00,R52
 F123 E6 F1 JNZ LF116

F125 12 37 MOV R55,A
 F127 8D C0 01 CMPA @C001
 F12A E6 07 JNZ LF133 ;ROM Checksum error

F12C 12 36 MOV R54,A
 F12E 8D C0 00 CMPA @C000
 F131 E2 01 JZ LF134

;
 ; Lock up Processor

F133 01 LF133 IDLE ;# WILL COME HERE IF ERROR FOUND

F134 B5 LF134 CLR A
 F135 8B 67 E5 STA @67E5

;
 ; TRAP 14 (Not Used)

F138 72 05 13 LF138 MOV %05,R19
 F13B 06 DINT

;
 ; Reset serial port

F13C A2 00 11 MOVP %00,SMODE ;Serial Mode
 F13F A2 40 11 MOVP %40,SCTL0 ;Serial Control 0

;
 ; SMODE:
 ; Asynchronous mode, 8 data bits
 ; 1 stop bit, No parity

F142 A2 4E 11 MOVP %4E,SMODE ;Serial Mode

;
 ; SCTL0:
 ; Reset error flag, Enable Rx and Tx

```

F145 A2 15 11      MOVP %15,SCTL0 ;Serial Control 0
;
; SCTL1:
;
; Internal SCLK from Timer 3
; Clear T3FLG, Disable Timer 3 from setting INT 4
; Timer prescale = div by 32
;
F148 A2 40 15      MOVP %40,SCTL1 ;Serial Control 1
;
; T3DATA:
; Divisor = 23 so
; SCLK = 1789773/2/32/23 = 1215.88 baud
;
F14B A2 17 14      MOVP %17,T3DATA ;Timer 3 Data
;
; Stack Pointer = >4D
;
F14E 52 4D          MOV %4D,B
F150 0D              LDSF    ;SP=>4D
;
; ADDR:
; Bits 0-3,7 : output
;
F151 A2 8F 05      MOVP %8F,ADDR ;Port A Direction
;
; U24 >011C
;
F154 A2 10 1C      MOVP %10,P28 ;Write to U24 (>011C)
;
; APOR:
; A7 0 U6P13 (88303 ADM)
; A3 x n/c
; A2 1 U4P15,CR20-C (L=Descrambling)
; A1 0 P1P6 (L=Videocipher Signal)
; A0 0 DED *RESET
;
F157 A2 04 04      MOVP %04,APORT ;Port A Data
;
; BPOR:
; B3 1 TxD (Not used)
; B2 1 P1P7 (L pulse each frame)
; B1 0 U6P12 (88303 LDI)
; B0 0 U7P7 (DED CFB)
;
F15A A2 0C 06      MOVP %0C,BPORT ;Port B Data
;
F15D 72 11 06      MOV %11,R6
;
F160 22 0F          MOV %0F,A
F162 8E C3 92      CALL @C392 ;# TRAP 17, init display chip.
;
F165 88 03 7F 37      MOVD %037F,R55 ;R54,55= >037F (895d)
LF169 ANDP %FE,APORT ;Set A0 - DED RESET low
F16C A4 01 04      ORP %01,APORT ;Set A0 - DED RESET high
DECD R55
F171 E3 F6          JC LF169
F173 88 4D AF 37      MOVD %4DAF,R55 ;200ms
LF177 DECD R55
F179 E3 FC          JC LF177
F17B 22 0F          MOV %0F,A ; ask for u7 A port data

```

F17D F9 TRAP 6 ;Write A to DED
 F17E F4 TRAP 11 ;Read DED/U5 data
 F17F 8B 62 28 STA @6228
 F182 22 0D MOV %OD,A ;
 F184 F9 TRAP 6 ;Write A to DED
 ;
 ; Serial Number
 F185 F4 TRAP 11 ;Read DED/U5 data
 F186 24 20 OR %20,A
 F188 8B 62 39 STA @6239
 F18B F4 TRAP 11 ;Read DED/U5 data
 F18C 8B 62 38 STA @6238
 F18F 82 1A MOVP A,P26 ;Write A to U24 (>011A)
 F191 F4 TRAP 11 ;Read DED/U5 data
 F192 8B 62 37 STA @6237
 F195 F4 TRAP 11 ;Read DED/U5 data
 F196 8B 62 36 STA @6236
 F199 F4 TRAP 11 ;Read DED/U5 data
 F19A 8B 62 35 STA @6235
 ;
 F19D B5 CLR A ;A=0
 F19E 8B 62 2B STA @622B ;
 F1A1 8B 62 25 STA @6225 ;
 F1A4 8B 62 8D STA @628D ;
 F1A7 8B 62 8C STA @628C ;
 F1AA 8B 67 E6 STA @67E6 ;# STACK PTR HOLDER (SEE MAIN LOOP)
 F1AD 22 FF MOV %FF,A ;A=>FF
 F1AF 8B 62 20 STA @6220 ;
 F1B2 8B 62 21 STA @6221 ;
 F1B5 D0 17 MOV A,R23 ;R23=>FF
 F1B7 D0 14 MOV A,R20 ;R20=>FF
 F1B9 88 F7 DA 3B MOVD %F7DA,R59 ;# R58,59=LF7DA. INDIRECT BRANCH
 ADDRESSES
 F1BD 88 F8 3B 39 MOVD %F83B,R57 ;# R56,57=LF83B. USED BY INT3.
 F1C1 D5 04 CLR R4 ;R4=00
 F1C3 D5 05 CLR R5 ;R5=00
 F1C5 88 60 00 31 MOVD %6000,R49 ;# INIT MESSAGE AREA POINTER.
 F1C9 8E F1 E1 CALL @F1E1 ;
 F1CC D5 20 CLR R32 ;R32=00
 F1CE 72 08 21 MOV %08,R33 ;R33=08
 F1D1 88 FF FF 44 MOVD %FFFF,R68 ;R67,68=>FFFF
 F1D5 D5 18 CLR R24 ;R24=00
 ;
 ; IOCNT0:
 ; INT 3 : Cleared and Enabled (U24P26,U5P14)
 ; INT 1 : Cleared and Enabled (U24P1)
 ;
 F1D7 A2 BB 00 MOVP %BB,IOCNT0 ;I/O Control Register 0
 ;
 ; IOCNT1:
 ; INT 4 : Cleared and Enabled (Serial Port)
 ; INT 5 : Disabled (Not used)
 ;
 F1DA A2 02 10 MOVP %02,IOCNT1 ;I/O Control Register 1
 F1DD 05 EINT
 F1DE 8C F1 FF BR @F1FF
 ;

;# THIS SECTION CHECKS TO SEE IF THE 1ST MESSAGE BYTE IS FF. IF
;# NOT, THEN CHECK TO SEE IF IT IS A VALID COMMAND. IF IT IS, THEN
;# PUSH THE ADDRESS OF THE ASSOCIATED ROUTINE ONTO THE STACK. IF THE
;# BYTE WAS FF, 0 IT.

F1E1 D5 08 LF1E1 CLR R8 ;R8=00
F1E3 32 08 LF1E3 MOV R8,B ;B=>00,33,66,99
F1E5 AA 60 00 LDA @6000(B) ;Get byte
F1E8 B3 INC A ;Is it >FF ?
F1E9 E2 03 JZ LF1EE ;Yes
F1EB 8E F2 2F CALL @F22F ;No
F1EE 32 08 LF1EE MOV R8,B
F1F0 B5 CLR A ;A=00
F1F1 AB 60 00 STA @6000(B) ;Clear message
F1F4 78 33 08 ADD %33,R8 ;Go to next message
F1F7 7D CC 08 CMP %CC,R8 ;Done ?
F1FA E6 E7 JNZ LF1E3 ;No, continue
F1FC D5 08 CLR R8 ;Return with R8=00
F1FE 0A RETS

; Main Loop

;# THE IDEA OF THE FIRST PART OF MAIN LOOP IS TO MAKE
67E6 POINT TO
WITH THE MOST ;# THE STACK LOCATION OF THE CMD ROUTINE ASSOCIATED
;# RECENTLY RECEIVED MESSAGE.

F1FF 09 LF1FF STSP
F200 B6 XCHB A ;A=SP
F201 8D 67 E6 CMPA @67E6 ;Stack Pointer
F204 E7 03 JNC LF209 ;#JMP IF STK PTR < 67E6
F206 8B 67 E6 STA @67E6 ;Stack Pointer
F209 32 08 LF209 MOV R8,B ;B=>00,33,66,99
F20B 06 DINT
F20C D3 44 INC R68 ;#16 BIT INCREMENT. FFFF AT POWER UP.
F20E 79 00 43 ADC X00,R67
F211 05 EINT
F212 AA 60 00 LDA @6000(B) ;#GET 1ST MESSAGE BYTE
F215 E2 F2 JZ LF209 ;#WAIT FOR COMMAND
F217 8E F2 2F CALL @F22F ;#PUSH COMMAND ROUTINE ADDRESS ONTO STACK
F21A 32 08 MOV R8,B ;# R8=0 AFTER POWER UP
F21C B5 CLR A ;A=00
F21D AB 60 00 STA @6000(B) ;#0--> 1ST MESSAGE BYTE
F220 8B 62 25 STA @6225 ;
F223 78 33 08 ADD %33,R8 ;Go to next message
F226 7D CC 08 CMP %CC,R8 ;Done ?
F229 E6 02 JNZ LF22D ;No, continue
F22B D5 08 CLR R8 ;# R8=00, START OVER
F22D EO D0 LF22D JMP LF1FF ;Infinite loop

F22F B3 ;# THIS SECTION CHECKS THE 1ST BYTE OF A MESSAGE TO SEE
IF ITS A VALID
;# COMMAND. THE BYTE IN REGISTER B IS AN INDEX INTO
;# THE COMMAND TABLE.

F22F INC A ;Is A >FF ?
F230 E6 0D JNZ LF23F ;No, return
F232 AA 60 01 LDA @6001(B) ;Get byte

F235 2D C0 CMP %CO,A ; >= >CO ?
F237 E3 06 JC LF23F ; Yes, return
F239 23 3F AND %3F,A ; No
F23B 2D 20 CMP %20,A ; Is A >= >20 ?
F23D E7 01 JNC LF240 ; No, continue
F23F 0A LF23F RETS
F240 D0 09 ;
:# THIS PUSHES ADDRESS OF COMMAND ROUTINE ONTO THE STACK. AS OF 6/86
:# I DON'T YET KNOW WHAT CAUSES THESE COMMAND ROUTINES TO EXECUTE.

LF240 MOV A,R9 ; R9=Command
F242 C0 MOV A,B
F243 AA DD C6 LDA @DDC6(B) ; Push routine address on stack
F246 B8 PUSH A
F247 AA DD E6 LDA @DDE6(B)
F24A B8 PUSH A
F24B 0A RETS

; Commands >00 + >01

F24C 12 1B LF24C MOV R27,A
F24E E6 17 JNZ LF267
F250 8A 62 23 LDA @6223
F253 27 10 0E BTJZ %10,A,LF264
F256 AA F4 02 LDA @F402(B)
F259 C0 MOV A,B
F25A AA 61 19 LDA @6119(B)
F25D 32 08 MOV R8,B
F25F AD 60 02 CMPA @6002(B)
F262 E6 03 JNZ LF267
F264 8E F3 C5 LF264 CALL @F3C5
F267 0A LF267 RETS

; Commands >02 + >03

F268 32 08 LF268 MOV R8,B ;
F26A 8A 62 38 LDA @6238 ; Compare serial numbers
F26D AD 60 02 CMPA @6002(B)
F270 E6 F5 JNZ LF267
F272 8A 62 37 LDA @6237
F275 AD 60 03 CMPA @6003(B)
F278 E6 ED JNZ LF267
F27A 8A 62 36 LDA @6236
F27D AD 60 04 CMPA @6004(B)
F280 E6 E5 JNZ LF267
F282 8A 62 35 LDA @6235
F285 AD 60 05 CMPA @6005(B)
F288 E6 DD JNZ LF267
F28A AA 60 18 LDA @6018(B) ;
F28D D0 0A MOV A,R10
F28F 8D 62 47 CMPA @6247 ; Service ID
F292 E2 06 JZ LF29A
F294 8A 62 23 LDA @6223
F297 26 10 65 BTJZ %10,A,LF2FF
F29A 12 0A LF29A MOV R10,A ;
F29C 8B 62 47 STA @6247 ; Service ID
F29F AA 60 1B LDA @601B(B) ;
F2A2 8B 62 23 STA @6223 ;

```

F2A5 26 20 05      BTJO %20,A,LF2AD
F2A8 22 FF          MOV %FF,A ;A=>FF
F2AA 8B 62 60        STA @6260 ;
F2AD AA 60 1A        LF2AD LDA @601A(B)
F2B0 8B 62 22        STA @6222
F2B3 8A 62 1B        LDA @621B
F2B6 2E 01          DAC %01,A
F2B8 8B 62 1B        STA @621B
F2BB E6 08          JNZ LF2C5
F2BD 8A 62 1A        LDA @621A
F2C0 2E 01          DAC %01,A
F2C2 8B 62 1A        STA @621A
F2C5 4D 09 17        LF2C5 CMP R9,R23
F2C8 E6 03          JNZ LF2CD
F2CA 72 FF 17        MOV %FF,R23
F2CD 8E F3 C5        LF2CD CALL @F3C5
F2D0 88 61 E4 48        MOVD %61E4,R72
F2D4 8E C1 16        CALL @C116
F2D7 0A              RETS
;
; Command >04 + >05
;
F2D8 32 08          LF2D8 MOV R8,B ;Message pointer
F2DA AA 60 02        LDA @6002(B)
F2DD 8D 62 47        CMPA @6247 ;Service ID
F2E0 E6 1D          JNZ LF2FF
F2E2 AA 60 03        LDA @6003(B)
F2E5 8D 62 46        CMPA @6246
F2E8 E6 15          JNZ LF2FF
F2EA AA 60 1B        LDA @601B(B)
F2ED 32 1B          LF2ED MOV R27,B
F2EF E6 0E          JNZ LF2FF
F2F1 D0 0A          MOV A,R10
F2F3 8A 62 33        LDA @6233
F2F6 E2 04          JZ LF2FC
F2F8 1D 0A          CMP R10,A
F2FA E6 03          JNZ LF2FF
F2FC 8E F3 C5        LF2FC CALL @F3C5
F2FF 0A              LF2FF RETS
;
; Command >06 + >07
;
F300 32 08          LF300 MOV R8,B
F302 AA 60 25        LDA @6025(B)
F305 E0 E6          JMP LF2ED
;
; Command >1F
zero ram in u7 and write in new id number then initialize u20 ram
;
F307 8A 62 25        LF307 LDA @6225 ;>7E entered from keyboard ?
F30A B3              INC A
F30B E6 F2          JNZ LF2FF ;No, return
F30D 06              DINT
F30E 22 0A          MOV %0A,A ;Enter active key (Unaltered)
;Encrypt
F310 F9              TRAP 6 ;Write A to DED
;
F311 22 FF          MOV %FF,A ;Write 20 (dec) >FF's to DED
F313 F9              LF313 TRAP 6 ;Write A to DED

```

F314 B2 DEC A
 F315 2D EC CMP XEC,A
 F317 E6 FA JNZ LF313
 ;
 F319 22 0C MOV ZOC,A ;Enter active key
 ;Decrypt
 F31B F9 TRAP 6 ;Write A to DED
 F31C 52 02 MOV Z02,B
 F31E 38 08 ADD R8,B
 F320 A8 60 00 35 MOVD %6000(B),R53
 F324 72 04 10 MOV Z04,R16 ;4 bytes
 F327 F8 TRAP 7 ;Write R16 bytes @R52,53 to DED
 F328 22 90 MOV Z90,A ;
 ;
 F32A F9 TRAP 6 ;Write A to DED
 F32B 22 57 MOV Z57,A ;
 F32D F9 TRAP 6 ;Write A to DED
 F32E 22 37 MOV Z37,A ;
 F330 F9 TRAP 6 ;Write A to DED
 F331 06 LF331 DINT
 F332 8E F4 31 CALL @F431 ;Fill RAM with 00's
 F335 8E D0 A8 CALL @D0A8 ;Initialize tables
 F338 22 FF MOV ZFF,A ;A=FF
 F33A 8B 62 8B STA @628B ;
 F33D 8B 62 68 STA @6268 ;Rating ceiling Password
 F340 8B 62 60 STA @6260 ;Purchase Password
 F343 22 01 MOV Z01,A ;A=01
 F345 8B 62 53 STA @6253 ;Program rating ceiling
 F348 8C F0 E3 BR @FOE3
 ;
 ; Command >1E
 ;
 F34B 8A 62 25 LF34B LDA @6225 ;>7E entered from keyboard ?
 F34E B3 INC A
 F34F E6 39 JNZ LF38A ;No, return
 F351 32 08 MOV R8,B ;
 ;
 F353 8A 62 38 LDA @6238 ;Compare serial numbers
 F356 AD 60 02 CMPA @6002(B)
 F359 E6 2F JNZ LF38A
 F35B 8A 62 37 LDA @6237
 F35E AD 60 03 CMPA @6003(B)
 F361 E6 27 JNZ LF38A
 F363 8A 62 36 LDA @6236
 F366 AD 60 04 CMPA @6004(B)
 F369 E6 1F JNZ LF38A
 F36B 8A 62 35 LDA @6235
 F36E AD 60 05 CMPA @6005(B)
 F371 E6 17 JNZ LF38A
 ;
 ; IOCNTO:
 ; INT 3 : Disabled (U24P26,U5P14)
 ; INT 1 : Enabled (U24P1)
 ;
 F373 A2 89 00 MOVF %89,IOCNTO ;I/O Control Register 0
 ;
 F376 22 0B MOV ZOB,A ;Enter active key
 ;Encrypt ?
 ;Cipher feedback mode ?
 F378 F9 TRAP 6 ;Write A to DED

F379 58 06 ADD %06,B ;Skip serial number
 F37B A8 60 00 35 MOVD %6000(B),R53 ;
 F37F 72 08 10 MOV %08,R16 ;8 bytes
 F382 F8 TRAP 7 ;Write R16 bytes @R52,53 to DED
 F383 88 60 00 35 MOVD %6000,R53 ;Return with R52,53=L6000
 ;
 ; IOCNTO:
 ; INT 3 : Cleared and Enabled (U24P26,U5P14)
 ; INT 1 : Enabled (U24P1)
 F387 A2 B9 00 MOVP %B9,IOCNTO ;I/O Control Register 0
 F38A 0A LF38A RETS
 ; Command >0D
 F38B 32 08 LF38B MOV R8,B ;
 F38D AA 60 1F LDA @601F(B) ;Look at byte 31 (dec) of message
 F390 8D 62 47 CMPA @6247 ;Current Service ID ?
 F393 E6 F5 JNZ LF38A ;No, return
 F395 8C F2 FC BR @F2FC ;Yes
 ; Command >0B
 F398 32 08 LF398 MOV R8,B ;
 F39A 8A 62 38 LDA @6238 ;Compare serial numbers
 F39D AD 60 02 CMPA @6002(B)
 F3A0 E6 E8 JNZ LF38A
 F3A2 8A 62 37 LDA @6237
 F3A5 AD 60 03 CMPA @6003(B)
 F3A8 E6 E0 JNZ LF38A
 F3AA 8A 62 36 LDA @6236
 F3AD AD 60 04 CMPA @6004(B)
 F3B0 E6 D8 JNZ LF38A
 F3B2 8A 62 35 LDA @6235
 F3B5 AD 60 05 CMPA @6005(B)
 F3B8 E6 D0 JNZ LF38A
 ;
 F3BA AA 60 0C LDA @600C(B) ;Look at byte 13
 F3BD 8D 62 47 CMPA @6247 ;Current Service ID ?
 F3C0 E6 D8 JNZ LF38A ;No, return
 F3C2 8C F2 FC BR @F2FC ;Yes
 ;
 F3C5 32 09 LF3C5 MOV R9,B
 F3C7 AA F4 10 LDA @F410(B)
 F3CA E6 01 JNZ LF3CD
 F3CC OA RETS
 F3CD D0 09 LF3CD MOV A,R9
 F3CF 88 60 FF 4A MOVD %60FF,R74
 F3D3 B2 DEC A
 F3D4 48 00 4A ADD R0,R74
 F3D7 79 00 49 ADC %00,R73
 F3DA AA F4 02 LDA @F402(B)
 F3DD 48 00 4A ADD R0,R74
 F3E0 79 00 49 ADC %00,R73
 F3E3 AA F4 1E LDA @F41E(B)
 F3E6 32 08 MOV R8,B
 F3E8 38 00 ADD R0,B

```

    ; IOCNT1:
    ; INT 4 : Disabled (Serial Port)
    ;
F3EA A2 08 10      MOVP %08,IOCNT1 :I/O Control Register 1
    ;
    ; IOCNT0:
    ; INT 3 : Disabled (U24P26,U5P14)
    ; INT 1 : Enabled (U24P1)
    ;
F3ED A2 89 00      MOVP %89,IOCNT0 :I/O Control Register 0
    ;
F3F0 AA 60 00      LF3F0 LDA @6000(B) :
F3F3 9B 4A          STA *R74 :
F3F5 C2            DEC B :
F3F6 DB 4A          DECD R74 :
F3F8 DA 09 F5      DJNZ R9,LF3F0
    ;
    ; IOCNT0:
    ; INT 3 : Enabled (U24P26,U5P14)
    ; INT 1 : Enabled (U24P1)
    ;
F3FB A2 99 00      MOVP %99,IOCNT0 :I/O Control Register 0
    ;
    ; IOCNT1:
    ; INT 4 : Enabled (Serial Port)
    ;
F3FE A2 09 10      MOVP %09,IOCNT1 :I/O Control Register 1
F401 0A             RETS
    ;
F402 00 63 07 6A   LF402 DB >00,63,07,6A,1D,80,3A :
F409 9D 00 00 E5   DB >9D,00,00,E5,F9,00,C6
    ;
F410 07 07 16 16   LF410 DB >07,07,16,16,1D,1D,25 :
F417 25 00 00 14   DB >25,00,00,14,07,00,1F
    ;
F41E 07 07 1A 1A   LF41E DB >07,07,1A,1A,1D,1D,25 :
F425 25 00 00 14   DB >25,00,00,14,0B,00,1F
    ;
    ; TRAP 10
    ;
F42C AA F4 02      LF42C LDA @F402(B)
F42F C0             MOV A,B
F430 0A             RETS
    ;
    ; :Fill RAM with 00's
F431 88 07 FF 4A   LF431 MOVD %07FF,R74 ;RAM size
F435 88 67 FF 35   MOVD %67FF,R53 ;End of RAM
F439 B5             CLR A ;A=00
F43A 9B 35          LF43A STA *R53
F43C DB 35          DECD R53
F43E DB 4A          DECD R74
F440 E3 F8          JC LF43A
F442 0A             RETS
    ;
    ; INT 1 - External (U24P1)
    ;
    ;# THIS SECTION BASICALLY LOADS COMMAND MESSAGES FROM
    ;# AREAS IN THE 2K RAM CHIP STARTING EITHER AT 6000,
U24 INTO 1 OF 5
    ;# 6033, 6066, 6099

```

```

;# OR 60CC.
;
F443 B8 LF443 PUSH A
F444 C8 PUSH B
F445 12 04 MOV R4,A
F447 E6 49 JNZ LF492 ;#JUMP IF LAST TIME THRU THIS ROUTINE IT
EXIT-
;#ED BEFORE MSG FROM U24 COMPLETELY READ.
F449 A6 01 1A 73 BTJOP Z01,P26,LF4C0 ;U24 status ?
F44D 91 18 MOVP P24,B ;Read U24 data (>0118)
F44F 5D 90 CMP Z90,B
F451 E6 0A JNZ LF45D
F453 88 60 CC 33 MOVD %60CC,R51 ;#SET TO READ PROGRAM RATINGS ?
F457 9A 33 LDA *R51
F459 E6 72 JNZ LF4CD
F45B E0 2A JMP LF487
F45D 98 31 33 LF45D MOVD R49,R51 ;R50,51=R48,49
F460 9A 31 LDA *R49
F462 E2 23 JZ LF487 ;#CHECK 1ST MESSAGE BYTE. IF 0, THEN THIS
AREA
;#IS CLEAR TO RECEIVE U24 MESSAGE.
F464 8A 62 1D LDA @621D
F467 2E 01 DAC Z01,A ;Decimal A=A+1
F469 8B 62 1D STA @621D
F46C E6 08 JNZ LF476
F46E 8A 62 1C LDA @621C
F471 2E 01 DAC Z01,A
F473 8B 62 1C STA @621C
F476 57 40 54 LF476 BTJZ Z40,B,LF4CD
F479 7A 33 31 SUB Z33,R49 ;#Reset message pointer (TO NEXT LOWER MSG
;#AREA).
F47C E3 03 JC LF481
F47E 72 99 31 MOV Z99,R49 ;#RESULT OF SUB IS < 0
F481 98 31 33 LF481 MOVD R49,R51
F484 B5 CLR A
F485 9B 33 STA *R51
;# THE FOLLOWING 10 LINES IS A LOOP THAT LOADS THE RAM MESSAGE AREA
;# FROM U24 DATA.
F487 62 LF487 MOV B,A ;#IF GET HERE, 1ST MESSAGE BYTE IS 0.
LOAD B TO
F488 D3 33 LF488 INC R51 ;#2ND MESSAGE BYTE.
F48A 9B 33 STA *R51
F48C D3 04 INC R4
F48E A7 04 1A 32 BTJZP Z04,P26,LF4C4 ;#U24 status ? IF JUMP, EXIT INT1,
WILL FINISH
;#RECEIVING MESSAGE AT NEXT INT1.
F492 A6 01 1A 09 LF492 BTJOP Z01,P26,LF49F ;#U24 status ? IF JUMP, MSG
COMPLETE. EXIT INT
F496 7D 32 04 CMP Z32,R4
F499 E3 32 JC LF4CD ;#MAX MESSAGE SIZE IS 32.
F49B 80 18 MOVP P24,A ;Read U24 data (>0118)
F49D E0 E9 JMP LF488
;# IF GET HERE, THE MESSAGE IS < 32 BYTES BUT IS COMPLETE.
F49F A6 02 1A 1D LF49F BTJOP Z02,P26,LF4C0 ;#U24 status ?

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```

F4A3 22 FF          MOV %FF,A
F4A5 D0 05          MOV A,R5
F4A7 7D CC 33        CMP %CC,R51
F4AA E7 05          JNC LF4B1
F4AC 8B 60 CC        STA @6000
F4AF E0 0F          JMP LF4C0
F4B1 9B 31          LF4B1 STA *R49
F4B3 78 33 31        ADD %33,R49 ; Go to next message
F4B6 7D CC 31        CMP %CC,R49 ; Done ?
F4B9 E6 05          JNZ LF4C0 ; No, continue
F4BB 72 00 31        MOV %00,R49 ; Reset message pointer
F4BE E0 00          JMP LF4C0 ; ?

;# EXIT INT1

F4C0 80 18          LF4C0 MOVP P24,A ;#Read U24 data (WHY ?)
F4C2 D5 04          LF4C2 CLR R4 ;R24=00
;
; IOCNT0:
; INT 3 : Clear flag ? (U24P26,U5P14)
;
F4C4 91 00          LF4C4 MOVP IOCNT0,B ;Get interrupt flags
F4C6 53 D7          AND %D7,B ;Mask INT 3 flag
F4C8 92 00          MOVP B,IOCNT0
F4CA C9
F4CB B9
F4CC 0B             RETI
;
F4CD 32 06          LF4CD MOV R6,B
;
F4CF 53 7F          AND %7F,B
F4D1 92 1C          MOVP B,P28 ;Write B to U24 (>011C)
F4D3 32 06          MOV R6,B
F4D5 92 1C          MOVP B,P28 ;Write B to U24 (>011C)
F4D7 E0 E9          JMP LF4C2
;
; INT 3 - External (U24P26,U5P14)
;
;# BASIC STRUCTURE OF INT3--
;
;# THE "MAIN" SECTION OF INT3 (F4F4-F5D0) USES R19 AS AN INDEX INTO
;# A ROM TABLE OF ROUTINE ADDRESSES. THE INDEXED ADDRESS IS PUSHED
;# ONTO THE STACK AND THEN VIA A RETS INSTRUCTION WE BRANCH TO THAT
;# ROUTINE (1 OF 6 POSSIBILITIES). EACH OF THESE 6 ROUTINES EVENTU-
;# ALLY BRANCH TO F5D5. F5D5 IS A VERY VERY LONG UNSTRUCTURED STRING
;# OF BIT AND BYTE TESTS AND BRANCHES. I HAVE FLOWCHARTED IT COMPLETELY
;# BUT AT THIS TIME (6/86) I AM UNABLE TO PUT IT INTO ANY USEFUL CONTEXT.
;# (IN OTHER WORDS, I DON'T KNOW WHAT THE HELL IT ALL DOES).
;
;# NOTE THAT IF INT3 IS ENTERED WHEN R19=4, THEN BOTH A1 AND A2 MAY BE
;# SET LOW, INDICATING THAT A VIDEOCIPHER SIGNAL IS PRESENT AND THAT THE
;# UNIT IS DESCRAMBLING THE SIGNAL.
;
; IOCNT1:
; INT 4 : Disabled (Serial Port)
;
F4D9 A2 00 10        LF4D9 MOVP %00,IOCNT1 ;#I/O Control Register 1 (DISABLE
INT4)
F4DC 05
F4DD B8             EINT
                      PUSH A

```

```

F4DE CS PUSH B
F4DF 8A 60 CC LDA @60CC
F4E2 D0 03 MOV A,R3
F4E4 12 18 MOV R24,A
F4E6 E2 0C JZ LF4F4
F4E8 06 DINT
F4E9 8A 62 26 LDA @6226 ;
F4EC 2E 01 DAC %01,A ;
F4EE 8B 62 26 STA @6226 ;#INCREMENT WORD 6226
F4F1 8C F1 38 BR @F138 ;Warm restart
F4F4 72 FF 18 LF4F4 MOV %FF,R24 ;#R24=>FF, WILL DO WARM RESTART AT
NEXT INT3
      ;#UNLESS SOMETHING O'S R24.
F4F7 32 13 MOV R19,B
F4F9 AA F5 0E LDA @F50E(B) ;Push address on stack
F4FC B8 PUSH A
F4FD AA F5 14 LDA @F514(B)
F500 B8 PUSH A
F501 80 1C MOVP P28,A ;Read U24 data (>011C)
F503 27 01 07 BTJZ %01,A,LF50D
F506 7D 78 22 CMP %78,R34
F509 E2 02 JZ LF50D
F50B D3 22 INC R34
F50D 0A LF50D RETS ;#BRANCH TO ADDRESS PUSHED ONTO STACK (ONE
OF
      ;#6 ROUTINES INDEXED BY R19)

      ;# THE FOLLOWING ARE ADDRESSES EACH OF THE 6 ROUTINES THAT THE INT3 ENTRY
      ;# BRANCHES TO. THEY ALL EVENTUALLY GET TO F505.
      ;
F50E F5 LF50E DB LF534/256 ;# R19=0
F50F F5 DB LF549/256 ;# R19=1
F510 F5 DB LF563/256 ;# R19=2
F511 F5 DB LF584/256 ;# R19=3
F512 F5 DB LF5A9/256 ;# R19=4
F513 F5 DB LF558/256 ;# R19=5
      ;
F514 34 LF514 DB LF534 MOD 256 ;
F515 49 DB LF549 MOD 256 ;
F516 63 DB LF563 MOD 256 ;
F517 84 DB LF584 MOD 256 ;
F518 A9 DB LF5A9 MOD 256 ;
F519 58 DB LF558 MOD 256 ;
      ;
F51A 8E F8 22 LF51A CALL @F822 ;#FILL DISPLAY MEMORY WITH OF
F51D 8E F7 E6 CALL @F7E6
F520 73 5F 06 AND %5F,R6
F523 74 50 06 OR %50,R6
F526 73 FC 06 AND %FC,R6
F529 74 01 06 OR %01,R6
      ;
F52C A4 04 04 ORP %04,APORT ;Set A2 - CR20-C,U4P15 high
F52F D5 12 CLR R18
F531 8C F5 D5 BR @F5D5
      ;
      ;# R19=0
      ;
F534 BC LF534 RR A
F535 E7 09 JNC LF540
F537 D5 04 CLR R4 ;#INT1 MESSAGE COUNTER

```

F539 D5 05 CLR R5
F53B 72 01 13 MOV %01,R19 ;#NEXT INT3 GO TO F549
F53E E0 2E JMP LF56E
F540 A4 02 04 LF540 ORP %02,APORT ;Set A1 - P1P6 high (Videocipher
F543 74 40 06 OR %40,R6 ; Signal)
F546 8C F5 D5 BR @F5D5

;# R19=1

F549 7D 00 05 LF549 CMP %00,R5
F54C E6 1A JNZ LF568
F54E BC RR A
F54F E3 0E JC LF55F
F551 D3 12 INC R18
F553 7D 10 12 CMP %10,R18
F556 E7 09 JNC LF561
F558 A4 02 04 LF558 ORP %02,APORT ;Set A1 - P1P6 high (Videocipher
signal)
F55B D5 13 CLR R19 ;#NEXT INT3 GO TO F534
F55D E0 BB JMP LF51A
F55F D5 12 LF55F CLR R18
F561 E0 72 LF561 JMP LF5D5
;

; R19=2

F563 BC LF563 RR A
F564 E7 15 JNC LF57B
F566 D5 04 CLR R4
F568 72 03 13 LF568 MOV %03,R19
F56B A3 FD 04 ANDP %FD,APORT ;Set A1 - P1P6 Low (Videocipher
F56E D5 12 LF56E CLR R18 ; Signal)
F570 74 90 06 OR %90,R6
F573 73 BF 06 AND %BF,R6
F576 A4 04 04 ORP %04,APORT ;Set A2 - CR20-C,U4F15 high
F579 E0 5A JMP LF5D5
F57B D3 12 LF57B INC R18
F57D 7D 10 12 CMP %10,R18
F580 E7 53 JNC LF5D5
F582 E0 D4 JMP LF558
;

;# R19=3

F584 2D 47 LF584 CMP %47,A
F586 E3 0D JC LF595
F588 32 1D MOV R29,B
F58A 53 7F AND %7F,B
F58C 5D 04 CMP %04,B
F58E E6 05 JNZ LF595
F590 72 04 13 MOV %04,R19 ;#GO TO F5A9 at next int3
F593 E0 40 JMP LF5D5
F595 BC LF595 RR A
F596 E7 04 JNC LF59C
F598 D5 12 CLR R18
F59A E0 39 JMP LF5D5
F59C D3 12 LF59C INC R18
F59E 7D 0B 12 CMP %0B,R18
F5A1 E7 32 JNC LF5D5
F5A3 72 02 13 MOV %02,R19
F5A6 8C F5 1A BR @F51A

;# R19=4. MAY SET SIGNALS ACTIVE FOR VC2 SIGNAL PRESENT AND UNIT
;# DESCRAMBLING.

F5A9	A3 FB 06	LF5A9 ANDP %FB,BPORT ;Set B2 - P1P7 low (?)
F5AC	A4 04 06	ORP %O4,BPORT ;Set B2 - P1P7 high (?)
F5AF	23 FE	AND %FE,A
F5B1	2D 51	CMP %51,A
F5B3	E3 B3	JC LF568
F5B5	32 1D	MOV R29,B
F5B7	53 7F	AND %7F,B
F5B9	50 04	CMP %O4,B
F5BB	E6 AB	JNZ LF568
F5BD	76 20 20 05	BTJO %20,R32,LF5C6 ;#JMP IF UNIT NOT DESCRAMBLING
F5C1	A3 FB 04	ANDP %FB,APORT ;Set A2 - U4P15 LO (CR20 CATHODE)
F5C4	E0 03	JMP LF5C9
F5C6	A4 04 04	LF5C6 ORP %O4,APORT ;Set A2 - U4P15 HI (CR20 CATHODE)
F5C9	76 40 20 05	LF5C9 BTJO %40,R32,LF5D2
F5CD	73 EF 06	AND %EF,R6
F5D0	E0 03	JMP LF5D5
F5D2	74 10 06	LF5D2 OR %10,R6

;# EACH OF THE 6 INT3 ROUTINES END UP HERE.

F5D5	7D 03 13	LF5D5 CMP %O3,R19
F5D8	E7 1C	JNC LF5F6
F5DA	8A 62 20	LDA @6220 ;#USELESS INSTRUCTION
F5DD	4D 00 43	CMP R0,R67
F5E0	E7 0A	JNC LF5EC
F5E2	E6 12	JNZ LF5F6
F5E4	8A 62 21	LDA @6221
F5E7	4D 00 44	CMP R0,R68
F5EA	E3 0A	JC LF5F6
F5EC	12 43	LF5EC MOV R67,A
F5EE	8B 62 20	STA @6220
F5F1	12 44	MOV R68,A
F5F3	8B 62 21	STA @6221
F5F6	88 00 00 44	LF5F6 MOVD %0000,R68 ;
F5FA	32 06	MOV R6,B
F5FC	92 1C	MOV P B,P28 ;Write B to U24 (>011C)
F5FE	32 03	MOV R3,B
F600	E6 03	JNZ LF605
F602	8C F7 01	BR @F701
F605	D5 02	LF605 CLR R2
F607	8A 62 1F	LDA @621F ;#DECREMENT DOUBLEWORD 621E/621F
F60A	2E 01	DAC %O1,A
F60C	8B 62 1F	STA @621F
F60F	E6 08	JNZ LF619
F611	8A 62 1E	LDA @621E
F614	2E 01	DAC %O1,A
F616	8B 62 1E	STA @621E
F619	52 08	LF619 MOV %O8,B
F61B	AA 60 CC	LF61B LDA @60CC(B)
F61E	AB 62 2B	STA @622B(B)
F621	CA F8	DJNZ B,LF61B
F623	B5	CLR A
F624	8B 60 CC	STA @60CC
F627	8B 60 CD	STA @60CD
F62A	8A 62 2E	LDA @622E ;#USELESS
F62D	23 23	AND %23,A ;#USELESS

F62F 25 20 XOR %20,A ;#USELESS

F631 7D 04 13 CMP %04,R19
F634 E2 02 JZ LF638
F636 23 DF AND %DF,A
F638 32 06 LF638 MOV R6,B
F63A 53 DC AND %DC,B
F63C 34 00 OR R0,B
F63E D1 06 MOV B,R6
F640 8A 62 2E LDA @622E
F643 73 7B 07 AND %7B,R7
F646 26 40 03 BTJO %40,A,LF64C
F649 74 80 07 OR %80,R7
F64C 26 04 03 LF64C BTJO %04,A,LF652
F64F 74 04 07 OR %04,R7
F652 8A 62 2E LF652 LDA @622E
F655 26 18 02 BTJO %18,A,LF65A
F658 E0 3A JMP LF694
F65A D5 1B LF65A CLR R27
F65C B5 CLR A
F65D 8B 62 52 STA @6252
F660 12 15 MOV R21,A
F662 72 01 0E MOV %01,R14
F665 BE RL A
F666 DF 0E RLC R14
F668 32 06 MOV R6,B
F66A 53 F3 AND %F3,B
F66C 8A 62 2F LDA @622F
F66F 27 40 0A BTJZ %40,A,LF67C
F672 54 04 OR %04,B
F674 8A 62 78 LDA @6278
F677 27 01 02 BTJZ %01,A,LF67C
F67A 55 0C XOR %0C,B
F67C D1 06 LF67C MOV B,R6
F67E 72 84 1D MOV %84,R29
F681 8A 62 2F LDA @622F
F684 23 07 AND %07,A
F686 8B 62 54 STA @6254
F689 8A 62 53 LDA @6253
F68C 8D 62 54 CMPA @6254
F68F E3 03 JC LF694
F691 72 83 1D MOV %83,R29
F694 8A 62 2D LF694 LDA @622D
F697 C5 CLR B
F698 27 20 02 BTJZ %20,A,LF69D
F69B 52 63 MOV %63,B
F69D D5 1E LF69D CLR R30
F69F AA 61 31 LDA @6131(B)
F6A2 D0 10 MOV A,R16
F6A4 8A 62 2D LDA @622D
F6A7 15 10 XOR R16,A
F6A9 26 60 23 BTJO %60,A,LF6CF
F6AC 8A 62 33 LDA @6233
F6AF AD 61 36 CMPA @6136(B)
F6B2 E6 1B JNZ LF6CF
F6B4 AD 61 5D CMPA @615D(B)
F6B7 E6 16 JNZ LF6CF
F6B9 AA 61 3A LDA @613A(B)
F6BC 15 10 XOR R16,A

F6BE	26 E0 0E	BTJO XEO,A,LF6CF
F6C1	72 FF 1E	MOV XFF,R30
F6C4	8A 62 2E	LDA @622E
F6C7	26 18 05	BTJO X18,A,LF6CF
F6CA	AA 61 31	LDA @6131(B)
F6CD	E0 03	JMP LF6D2
F6CF	8A 62 2D	LF6CF LDA @622D
F6D2	C5	LF6D2 CLR B
F6D3	B0	TSTA
F6D4	E5 02	JPZ LF6D8
F6D6	52 63	MOV X63,B
F6D8	AA 61 19	LF6D8 LDA @6119(B)
F6DB	8B 01 18	STA @0118 ;
F6DE	AA 61 1A	LDA @611A(B)
F6E1	8B 62 46	STA @6246
F6E4	8A 62 23	LDA @6223
F6E7	73 FC 07	AND XFC,R7
F6EA	B0	TSTA
F6EB	E1 03	JN LF6F0
F6ED	74 01 07	OR X01,R7
F6F0	BE	LF6F0 RL A
F6F1	E5 03	JPZ LF6F6
F6F3	74 02 07	OR X02,R7
F6F6	7D 01 11	LF6F6 CMP X01,R17
F6F9	E2 4C	JZ LF747
F6FB	72 04 11	MOV X04,R17
F6FE	8C F7 DE	BR @F7DE
F701	D2 11	LF701 DEC R17 ;#GET HERE BECAUSE R3=0
F703	E2 02	JZ LF707
F705	9C 39	BR *R57
F707	8A 60 CD	LF707 LDA @60CD
F70A	C0	MOV A,B
F70B	B5	CLR A
F70C	8B 60 CD	STA @60CD
F70F	5D 90	CMP X90,B
F711	E6 02	JNZ LF715
F713	D5 02	CLR R2
;# UNLESS READING P28 HAS AN EFFECT ON U24, F715 THRU F726 DOES NOTHING.		
F715	91 1C	LF715 MOVP P28,B ;Read U24 data (>011C)
F717	B0	TSTA ;Clear carry
F718	CD	RRC B
F719	C2	DEC B
F71A	CC	RR B
F71B	CC	RR B
F71C	CC	RR B
F71D	C3	INC B
F71E	12 06	MOV R6,A
F720	BC	RR A
F721	CF	RLC B
F722	53 07	AND X07,B
F724	AA DD 56	LDA @DD56(B)
F727	4D 00 02	CMP R0,R2
F72A	E3 1B	JC LF747
F72C	D3 02	INC R2
F72E	8A 62 30	LDA @6230
F731	B3	INC A

F732 8B 62 30 STA @6230
F735 E6 10 JNZ LF747

1 F737 8A 62 31 LDA @6231
2 F73A B3 INC A
3 F73B 8B 62 31 STA @6231
4 F73E E6 07 JNZ LF747
5 F740 8A 62 32 LDA @6232
6 F743 B3 INC A
7 F744 8B 62 32 STA @6232
8 F747 72 04 11 LF747 MOV X04,R17
9 F74A 8A 62 30 LDA @6230
10 F74D 23 1F AND X1F,A
11 F74F E6 03 JNZ LF754
12 F751 8E CA 1A CALL @CA1A
13 F754 22 0E LF754 MOV X0E,A
14 F756 F9 TRAP 6 :Write A to DED
15 F757 12 07 MOV R7,A
16 F759 F9 TRAP 6 :Write A to DED
17 F75A 8A 62 2B LDA @622B
18 F75D E2 02 JZ LF761
19 F75F 9C 37 BR *R55
20 F761 8A 62 33 LF761 LDA @6233
21 F764 42 16 34 MOV R22,R52
22 F767 D0 16 MOV A,R22
23 F769 45 00 34 XOR R0,R52
24 F76C E2 0B JZ LF779
25 F76E 4D 00 34 CMP R0,R52
26 F771 E2 06 JZ LF779
27 F773 8E F8 22 CALL @F822
28 F776 8E F7 F1 CALL @F7F1
29 F779 42 15 10 LF779 MOV R21,R16
30 F77C 8A 62 2D LDA @622D
31 F77F D0 15 MOV A,R21
32 F781 45 00 10 XOR R0,R16
33 F784 73 E0 10 AND XE0,R16
34 F787 32 14 MOV R20,B
35 F789 8A 62 2E LDA @622E
36 F78C 23 18 AND X18,A
37 F78E D0 14 MOV A,R20
38 F790 E6 19 JNZ LF7AB
39 F792 12 34 MOV R52,A
40 F794 E6 0D JNZ LF7A3
41 F796 12 10 MOV R16,A
42 F798 E6 05 JNZ LF79F
43 F79A C1 TSTB
44 F79B E6 02 JNZ LF79F
45 F79D 9C 37 BR *R55
46 F79F 22 FF LF79F MOV XFF,A
47 F7A1 D0 17 MOV A,R23
48 F7A3 22 FF LF7A3 MOV XFF,A
49 F7A5 8B 62 79 STA @6279
50 F7A8 8C F9 99 BR @F999 ;#TRAP8. THIS NEVER GETS BACK TO F7E5 RETI
51 WHICH IS
52 ;#THE USUAL EXIT FOR INT3-F5D5. F999 IS ANOTHER VERY
53 ;#VERY LONG TREE ABD BRANCH TYPE SECTION OF CODE THAT
54 ;#IS THUS FAR (6/86) HARD TO FIGURE OUT.
55 F7AB 8A 62 53 LF7AB LDA @6253
56 F7AE 8D 62 54 CMPA @6254
57 F7B1 E1 2B JN LF7DE

1	F7B3	8A 62 2E	LDA @622E
2	F7B6	23 18	AND %18,A
3	F7B8	2D 18	CMP %18,A
4	F7BA	E6 05	JNZ LF7C1
5	F7BC	22 10	MOV %10,A
6	F7BE	F9	TRAP 6 ;Write A to DED
7	F7BF	E0 1D	JMP LF7DE
8	F7C1	26 10 05	LF7C1 BTJO %10,A,LF7C9
9	F7C4	22 08	MOV %08,A
10	F7C6	F9	TRAP 6 ;Write A to DED
11	F7C7	E0 15	JMP LF7DE
12	F7C9	22 06	LF7C9 MOV %06,A
13	F7CB	F9	TRAP 6 ;Write A to DED
14	F7CC	88 62 30 35	MOVD %6230,R53
15	F7D0	72 03 10	MOV %03,R16
16	F7D3	F8	TRAP 7 ;Write R16 bytes @R52,53 to DED
17	F7D4	E0 08	JMP LF7DE
18		:	;
19		:	TRAP 9
20	F7D6	D9 3B	LF7D6 POP R59 ;R58,59 is calling address
21	F7D8	D9 3A	POP R58
22	F7DA	88 F8 3B 39	LF7DA MOVD %F83B,R57 ;#R56,57=LF83B (SAME AS POWER UP VALUE)
23	F7DE	C9	LF7DE POP B
24	F7DF	B9	POP A
25		:	
26		:	IOCNT1:
27		:	INT 4 : Enabled (Serial Port)
28		:	
29	F7E0	A2 01 10	MOVP %01,IOCNT1 ;I/O Control Register 1
30	F7E3	D5 18	CLR R24 ;R24=00
31	F7E5	0B	RETI
32		:	
33	F7E6	B5	LF7E6 CLR A ;A=00
34	F7E7	8B 62 33	STA @6233 ;
35	F7EA	8B 62 2D	STA @622D ;
36	F7ED	D5 16	CLR R22 ;R22=00
37	F7EF	D5 03	CLR R3 ;R3=00
38	F7F1	B5	LF7F1 CLR A ;A=00
39	F7F2	8B 61 36	STA @6136 ;
40	F7F5	8B 61 5D	STA @615D ;
41	F7F8	8B 61 99	STA @6199 ;
42	F7FB	8B 61 C0	STA @61C0 ;
43	F7FE	8B 61 5F	STA @615F ;
44	F801	8B 61 C2	STA @61C2 ;
45	F804	8B 61 E7	STA @61E7 ;
46	F807	8B 62 19	STA @6219 ;
47	F80A	8B 62 27	STA @6227 ;
48	F80D	D5 1D	CLR R29 ;R29=00
49	F80F	D5 22	CLR R34 ;R34=00
50	F811	D5 1E	CLR R30 ;R30=00
51	F813	22 20	MOV %20,A ;A=>20
52	F815	8B 61 31	STA @6131 ;
53	F818	8B 61 3A	STA @613A ;
54	F81B	8B 61 94	STA @6194 ;
55	F81E	8B 61 9D	STA @619D ;
56	F821	0A	RETS
57		:	

F822 22 OF
F824 8E C3 92
F827 88 CC D7 3B

LF822 MOV %OF,A
CALL @C392
MOVD %CCD7,R59

1			
2	F82B	D5 19	CLR R25
3	F82D	B5	CLR A
4	F82E	8B 62 52	STA @6252
5	F831	8B 62 27	STA @6227
6	F834	B4	INV A
7	F835	8B 62 79	STA @6279
8	F838	D5 1B	CLR R27
9	F83A	0A	RETS
10			
11			